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ORIGINAL ARTICLES.

A REPORT OF THREE OPERATIONS FOR THE REMOVAL OF THE OVARIES AND FALLOPIAN TUBES BY ABDOMINAL SECTION.*

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THERE is no age but what has marked out a degree of progress in art and science since the world began, and in every epoch the observer has looked back with wonderment and surprise that so much advancement in every branch of undertaking and industry has been a fact during his own time.

To us to-day in those departments which make up the category of medicine and surgery we are grateful while expressing our own wonderment at the vast span of progress in knowledge and increase of facility in method that has marked not only the whole period of our own time, but even the past decade. Operations in surgery are to-day matters of no curiosity that were beyond the belief of those who were, during the earlier periods of this century, advanced high in the theory and practice of medicine, and there is scarcely a doubt to be retained that the same degree of surgical advancement will be the retrospect of those who shall be our posterity in the practice of our professional work. Within a very few years to open the abdominal cavity was only an expedient suggested or permitted as a dernier resort. Ovariotomy was not performed until the patient had about exhausted her vitality by the burden of her disease; then the very slender chance of recovery was taken, with a lamentably frequent fatal result. Abscesses within the abdominal cavity were allowed to rupture at the price of the patient's life, rather than anticipate the certain calamity by an early puncture. Patients suffering with diseases of the pelvic viscera made frequent visits to her physician for local treatment to diseased ovaries and fallopian tubes that could never be reached or successfully alleviated by topical applications made to the neck of the uterus. Fibroid growths within the uterine cavity were ineffectually removed through the vagina, or if so, with the attendant dangers of hemorrhage, pelvic cellulites, or septicæmia, rather than ligate the principal nutrient supply, simply owing to the supposed dangers of opening the abdominal cavity, and it was not until Dr. Lawson Tait, of Birmingham, England, began to operate directly upon diseased ovaries and fallopian tubes by removing them did the medical profession, encouraged by this phenomenal record of recoveries, take to themselves sufficient confidence to imitate his example. During the months of March and April of this year I performed this operation upon three different occasions, and in each case was rewarded by the recovery of my patient, two of the operations being performed at private residences, the other at the Woman's Homœopathic Hospital of this city. The keystone of success, in my opinion, lies in the obtaining of most positive and certain antiseptic regulations in every detail, and the first object in this respect lies in having the surroundings of the room where the operation is to be performed positively free from all of those influences that contribute in any possible way to the generation of poisonous emenations. Before the operation, the room should be prepared as follows: The bed clothes, sheets and towels, together with all of the other contents of the room, should be thoroughly fumigated by the burning of sulphur for the period of at least one hour. The patient should be bathed, and her body sponged with a solution of mercury bichloride, 1-5000, previous to being dressed in her night clothes, which have been previously antisepticised in the room by the fumes of the burning sulphur. The nurse, assistants and operator should, after washing thoroughly their arms and hands in carbolized water, rewash them with a strong solution of bichloride of mercury. The operator should wear a gown which has been antisepticised, and the assistants should remove their coats, vests and collars, on account of the danger of carrying and conveying septic germ which propogate in cotton wool. All instruments, previous to and during the operation, should remain in a basin of water which has been carbolized, and, if afterwards laid down for the better convenience of the operator, they should be placed upon a

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towel, which has been previously carbolized, and spread beside the patient. The patient, having been anesthetized, the abdomen should be shaved by one of the assistants down to the pubic bone, who will afterwards empty the bladder with a catheter. The abdomen is now rewashed with hydronaphthal soap, being followed by a thorough sponging with a solution of bichloride of mercury, 1-2000. A space of six or eight inches square is now left, exposing the abdomen, which is outlined by sheets of rubber tissue, which are adhered by first applying ether to their border. This protects the patient and prevents her under clothing from being soiled or wet during the progress of the operation. We cannot entertain too much care and caution in the preparation of our patient, or be unmindful of the necessity of cleanliness, and the use of all those means which contribute to the prevention of septic infection; this influence, according to the clinical record of these cases, being almost exclusively the cause of unsuccessful results, by death, rather than general peritonitis.

My first patient was Mrs. M., aged 29 years, and the operation was performed Wednesday afternoon, March 8th inst. She had been in declining health since her last confinement, which occurred nearly six years ago; her case had been differently diagnosed and unsuccessfully treated during her experience with several physicians during this period. She came under my professional care something over a year ago, and was then suffering with severe pain, which was intermittent throughout the pelvis but which seemed to emenate from the left inguinal region, often radiating towards the hip, producing lameness for days at a time. In conjunction with these symptoms of pain, her appetite was variable, her spirits despondent, and the evidences of poor assimilation made prominent by a general condition of anemia. Once or twice during the month she would have slight rigors, with nausea, followed within a day or two by a discharge of probably a tablespoonful of pus from the vagina, after which there would be for a few days some amelioration in her degree of suffering. Menstruation was apparently normal, as regards quantity, although frequently delayed. By digital examination, *per Vaginum*, there was a greater degree of sensitiveness upon the left than the right side, the pain being so intense along the course of the broad ligament as to admit of but the most careful pressure. For months, besides the administration of the indicated internal remedies, I applied those astringents which suggested themselves to me from time to time, all without there being any permanent evidences of improvement in my patient's condition; on the contrary, her despondency becoming more abject, and the whole train of pathological phenomena perceptibly more aggravated and unmanageable. At last I suggested the advisability of performing a laparotomy for the removal of the disease bodily, and after my patient had fully considered the danger of the undertaking, she consented to my proposal. The method of the operation was as follows: After making the primary incisions, the abdominal cavity was opened sufficiently to admit of the entrance of two fingers of my right hand, with which I searched for the right ovary, it being easily found in its normal position unadherent. It was now but the work of a few moments to withdraw it through the opening ligate, its ligament, and excise it. The removal of the left ovary was, however, a more difficult and trying task, ten minutes, at least, being consumed in my efforts to locate it, and, finally when it was found, it was so surrounded by inflammatory deposits that its outlines were completely obliterated.

After separating with the finger all adhesions that were amenable to a reasonable degree of pressure, an effort was made to bring the ovary through the abdominal wound, but without avail, as it could hardly be raised but an inch or two out of its adherent bed besides the intestines, and omentum added complication to the difficulty by completely occluding it from view. I now concluded to enlarge the abdominal wound, which I did by extending the incision completely to the umbilicus; the peritoneum was also divided, after which the intestines were removed from their cavity to the surface of the abdomen, where, during the remainder of the operation, they were wrapped and re-wrapped in towels wrung out of hot carbolized water.

The ovary and its ligaments were now brought within the field of vision although deep within the pelvic cavity. The difficulty of ligation was finally overcome in this way. An assistant grasped the ovary with the tips of his fingers drawing it upwards as far as possible, and then by careful and patient manipulation I was able to slip and tighten a loop of catgut over his hand, and down to the ligament of the ovary where it was drawn fast. With a large sponge the omentum and intestines were now pushed upwards, and the ovary was placed where it could be manipulated. In this and my other operations I have used catgut as a ligature, it first having been fixed by puncturing the ligament and tube, crossed and then tied, care being taken to avoid puncturing the ovarian vessels. On examination

of the specimens in this case, the right ovary was normal in size, although the fallopian tube was very much thickened and hardened and at least twice its normal diameter. The left ovary was at least three times its proper size, and arising from its surface was a cyst about the size of a small orange, the tube being in its appearance and size similar to that found on the right side. The patient made a good recovery, although she had a slight rise in the temperature for several days probably due to a circumscribed peritonitis which supervened. The second operation was performed on April 5th inst, the patient being Mrs. V., aged 28 years. For a period of seven years, that being the date of her first and last confinement, she had suffered with a general metritis complicated with retro-version of that organ. Despite my most persistent and painstaking efforts the case seemed irremedial. To support the womb mechanically was impracticable, principally owing to the very sensitive condition of the tissues surrounding the pessary, the cellular tissue being so irritable as not to tolerate the slightest pressure without producing the most intense suffering. Leucorrhea was mucopurulent in character, and so profuse as to require the constant wearing of a napkin to the vulva. Menorrhagia so persistent as to necessitate the patient remaining in bed during nearly the whole period, in consequence of frequent attacks of faintness superinduced by the profuse loss of blood, which lasted from ten to fourteen days. The operation was suggested for two reasons. *First:* To restrain the enervation, the result of the profuse loss of menstrual blood. *Second:* To endeavor to cure the retroverted uterus. On the afternoon of the day of the operation all preparations were made regarding the patient and attendants, consistent with the most careful antiseptic rules, and with no circumstance unusual the ovaries and fallopian tubes on each side were found drawn through the abdominal opening and excised, the incision being no more than three inches in length. Upon examination the ovaries were somewhat antrophied and cystic, while the fallopian tubes were much enlarged and hardened by the subacute inflammation then existing. This patient made a very rapid recovery, and at no time during her convalescence was there any increase in the temperature of the body. The third case was operated upon on Wednesday afternoon, April 25th ultimo. Mrs. P., aged 31 years, had suffered for a period of ten years, her last pregnancy occurring about that time. Early in the history of her disease she suffered principally from an endo cervicle metritis, accompanied with the characteristic leucorrhea, which in quantity was superabundant. At least these were the phenomena that presented themselves at the period of my first professional introduction to the case, now nearly five years ago. After treating her with a satisfactory degree of success at that time, I lost all trace of the patient until she again presented herself at my office early in December last, when she complained of many of her previous symptoms, complicated by an intense degree of pain located principally in the left inguinal region. A digital examination revealed a very sensitive and painful condition in the supravagnial region, in the locality of the left ovary. An astringent application was made to the parts, hot water douches recommended, besides an internal remedy was prescribed. In a few days the pain was relieved by a profuse discharge of pus from the vagina. It was, however, but a short time thereafter when the old pain returned, and the same series of unhappy symptoms presented themselves. This patient menstruated every three weeks, and so profuse was the flow of blood that for several days at the beginning of the period she was necessitated to use ten to fifteen napkins every twelve hours. Entire loss of appetite, despondency of spirits, with pelvic pains, more or less intense, made up the chapter of her experience. The indications for the operation in my judgment lay in the menorrhagia and the existence of abscess of the fallopian tubes, which was clearly defined by the frequent purulent discharges, together with sensitiveness over the region of the tubes. This case presented some peculiarities comparable with the first one. After an incision was made through the abdominal wall, probably two or three inches in length, the right ovary was searched for, which was found in its normal site but bound down by numerous inflammatory deposits, which were however easily separated with the finger, although it appeared to be nearly stationary owing to its ligament being very short. The fallopian tubes also which should lie side by side with the ovary, and its ligament was missing, and for a period of some minutes I was at a loss to locate it. At last I found it turned around and around the ligament, close to the fundus of the uterus. After separating it, however, it appeared to be so abnormal in its appearance as to raise some doubts as to its identity, especially as the fimbriated extremity was so changed as to be unrecognizable. In endeavoring to bring the ovary to the abdominal opening for the purpose of ligating it, a degree of force was required upon the inelastic ligament, and although no traction was brought to bear but what seemed perfectly proper, yet you may well

imagine my consternation to find that instead of stretching the ligament that I had detatched the ovary, which I found in my hand. Naturally I looked for a profuse hemorrhage from the ovarian vessels, but the bleeding was insignificant. Upon a closer examination the ovary was shrivelled and degenerated, due in all probability to the very poor and deficient nutrient supply. The left ovary appeared more healthy, and in it probably lay all of the functionary power that existed. This ligament was like its fellow, very short and unyielding, and it was only after extending the incision to the umbilicus, and disemboweling the patient, that we were able to successfully manipulate the ovary. This patient developed symptoms of septicæmia from the outstart; the temperature rising as high as 103 degrees on the fifth day, but by carefully antiscepticizing the drainage tube, and prescribing remedies that seem to be indicated, the temperature fell to the normal point on the eighth or ninth day. This patient remained in bed for a period of three weeks, and left the hospital on the 25th day convalescent. In the first and third of these cases rubber drainage tubes were used, while in the second case there being no adhesions, the abdomen was completely closed. I have concluded, however, being guided by my past experience, that the next time I am called upon to perform a laparotomy to use either a glass tube for drainage or else one after the excellent plan devised by Dr. Sims, of New York, which being siphon like in shape admits of the washing out of the abdominal cavity in case septic poisoning supervenes, as, I believe, that rubber after being retained for two or three days becomes a potent factor in the dissemination of septic germs. In the last case recited the temperature remained above the normal point until the tube was removed, when within six hours the temperature fell to 98½ degrees. I also had the means of confirming this judgment recently after removing a large fatty tumor from the neck and shoulder, the temperature being one degree above normal on the fourth day. Within three or four hours after removing the tube, and thoroughly antisepticizing the parts, the temperature fell to the normal point.

In the first case the deep sutures were made with strong catgut, while in the last two with No. 27 silver wire; and while I know that custom has dictated the preference for the wire, all of these cases recovered without the supervention of ventral hernia, and the patient in whom the catgut sutures were used, being more predisposed by her corpulency to such an accident than the other, leads me to believe that catgut answers the purpose fully as well. Three months only have elapsed since the performance of the first of these operations, and time is yet too soon to permit me to be too critical on the result, as it relates to the present health of my patients, or to make any positive statements regarding the actual benefits which have been derived. My patients all believe that they have improved, and, regarding those that previously suffered with menorrhagia, their faces already give token of the benefit to their systems, owing to the saving of blood previously expended. All have had more or less headache—case number two, feeling well excepting intense pain through her eyes and head, which has been incessant during the past four weeks. I am inclined, however, to believe that this patient will soon be in good health.

While the objects of the operation is to eradicate the diseased ovaries and fallopian tubes, and the train of symptoms dependent upon their improper performance of function. Yet, this being accomplished, it cannot be supposed or made reasonable that the system shall submit to an enforced menopause without resentment. Nor would it appear reasonable that this serious change to the circulation of the blood could be suffered without more or less passive congestion of other organs, with consequent irritation of the sympathetic nervous system. Time must be required, and it is best to prepare our patients for the certainty of a tedious recovery.

Before closing my paper, I wish to attest to the very valuable assistance rendered me in the performance of these operations by Drs. F. T. Chaplain, Geo. J. Mirrielles and Augustus H. Ritter, to each of whom belongs, in no small degree, a share of whatever credit may have followed my humble efforts.

Oil of Peppermint as an Antiseptic.—W. L. Braddon has instituted extensive experiments to discover if possible an efficient microbicide which would be sufficiently harmless to human beings to answer for internal use. In a communication to the *Lancet* the author reports that these experiments were carried out, first under conditions as nearly as possible identical with those which obtain with wounds, etc., the relative powers of carbolic acid, iodine, iodoform, corrosive sublimate and peppermint, being compared. The observer considers the complete superiority of the last completely proved, and has tried its powers in actual practice with most excellent results. He adds: Absolutely harmless to the system in the largest doses, easily attainable and readily prepared, oil of peppermint thus forms the best, safest, and most agreeable of all known antiseptics. Trials of the value of the oil in phthisis indubitably showed that it produces when inhaled no ill, but only beneficial, effects, even in the latest stages of galloping consumption, checks it earlier in its progress, and sometimes completely cures. In two cases of diphtheria it is said to have also produced entire and rapid recovery.

SPECIFIC MEDICINE, OR CURES REGARDLESS OF SYMPTOMS.—PICHI—SALICYLIC ACID.

By W. M. Decker, M. D., Kingston, N. Y.

An old and well-established custom with homœopathic physicians is to give sulphur, in any given case in which the symptoms are too few or uncharacteristic to lead to a selection of the remedy, and then wait developments. Sulphur develops symptoms, or brings out latent characteristics of the disease, and with the aid of these new revelations the similar remedy may be selected. This is good practice and worthy of all acceptation; but when it does not work, what are you going to do? There is such a thing as a cure without symptomatic treatment. The remedy is not always a similar. There are drugs that will cure without special or definite indications for their use. We simply *know* that they will work, and that is all. It is a fact, known, and nothing more. Call it empiricism, quackery, or what you like, facts are facts, whether there is any explanation for them or not. If a physician *knows* that a drug will bring about a beneficial action in his patient, he should not be debarred from administering it simply because he cannot understand its action. We prescribe medicine for our patients, and, if they recover, we say we have cured them. The word cure does not mean anything except health restored. We give medicine, the patient gets well, and we say cured. But we never know the profundity of a cure. We know the means employed, and the results obtained; but who can follow the secret workings of the remedy within the organism? It is as mysterious as a spirit—as unknowable as God.

Such cures are witless cures. So are all cures to a greater or less degree. Such cures an overzealous devotee of the Hahnemannian system of medicine would claim was homœopathy in disguise. And this conceited wise man in medicine would cry out against such prescribers—forgive them, they know not what they do—*i. e.*, they knew not that the remedy was homœopathically indicated; and herein is ignorance. Such is often the case, but not always. This paper is dealing with the exceptions. This wise man would claim everything for homœopathy—again ignorance from a different source. True wisdom never boasts, is not conceited, believes in diversity, exercises charity and loves liberty.

Specific medicine, strictly speaking, is a misnomer. But there are remedies, which approximate very near to true specifics; and we wish to commend this practice, knowing that it is unscientific, and that it is necessarily limited, and believing that it is honorable when superior to other methods and means.

Strict homœopaths will not accept this practice, or only accept it as a forced put. But all homœopaths, who give sulphur as was stated in the opening of this paper, are practicing empiricism. Consistency, where will you find it? Not in man, nor schools, nor doctrines.

Let us now illustrate our theme by citing a few cases in which drug influence approximates to specific medicine.

The first case is one of catarrhal cystitis in a married lady over fifty years of age. Mucus was abundant in the urine, which was voided frequently, pain attending and following the act. There was more or less tenesmus of the bladder, and at times incontinence of urine. Several years ago she was under treatment a long time for catarrh of the bladder; and then the bladder was washed out, and various lotions were injected, hydrastis being one of them. Since that time she has suffered repeatedly with like attacks, and has usually been treated locally. Either from the local treatment, or the inflammatory action, or both, the sphincter of the bladder had become weakened, and, of late, an acute attack of cystitis would be followed by incontinence. The patient also had fissure of the anus and ulcer of the rectum. These complications undoubtedly aggravated the cystitis.

Surgical treatment established the healing process in the fissure and ulcer, and they were promptly healed; but the cystitis was persistent and difficult to remedy. Symptomatic treatment with similars, which usually is adequate, did not give prompt nor satisfactory results. Belladonna, cantharis, aconite, causticum, hydrastis and sulphur were given at various times, but there was no decided improvement; and without further delay pichi (fabinan embricata) was prescribed. No indications for this drug were known, except that it had been tried in similar cases and proved promptly and decidedly beneficial. There are no provings of this drug on man or the lower animals to show that it will produce cystitis, and, from the large doses in which it is administered, it is evident, that it possesses no such influence.

The patient took the pichi as follows: A teaspoonful of the fluid extract was added to one-half a glass of water, and a teaspoonful of this dilution was taken ever two hours. The following day the patient was emphatically better, and her improvement was continuous; and at the expiration of a week or ten days she was dismissed.

Another case, that of a young man, say twenty-

five years of age, under treatment thirty-three days for acute articular inflammatory rheumatism. This case was complicated by endocarditis, which temporarily crippled the valves of the heart; and there was dropsy of the lower extremities, abdomen and thorax. There was pronounced dyspnœa, which was attributed to the restricted play of the diaphragm, occasioned by the upward pressure of the ascites; also to the embarrassed circulation of the blood through the lungs, due, of course, to the valvular difficulties of the heart. These two conditions were sufficient to explain the dyspnœa without adding another, that of œdema of the thorax. The patient was obliged to assume the upright posture part of the time, because of the severity of the dyspnœa. The respirations were not recorded. The urine was not tested; but it was scanty and high-colored. The temperature stood, day after day, at about 100° F. Pulse not recorded. The rheumatism was migratory, and visited all the large joints, and some of the smaller; but was most constant in the ankle joints. This record begins after the disease was far advanced. The case had previously been under the care of another physician, who was taken ill, and was unable to continue the treatment.

The records of this case are taken largely from memory, and are not complete; but sufficient is stated to give a critic a fair impression of the case, and to cover the point involved. The point is this, that, after eighteen days of treatment by similars with such remedies as arsenicum, bryonia, pulsatilla, sulphur, spigelia, digitalis, phosphorous and nux vomica, with some improvement, but no pronounced change in the fever, salicylic acid was given. The acid was prescribed in pills of 2½ grains each. Two of these pills were given every two hours until four doses had been taken, then, one pill every four hours until the patient was again visited. The exact amount of the acid taken is not remembered. The following day the patient was free of fever, and was much improved generally. No unpleasant symptoms followed the administration of the acid. The acid was immediately stopped, and not given again until three days later, and then only a few pills. This last dose was again repeated in three days; thereafter the acid was discontinued.

The action of the acid seemed to be quite general. Its favorable influence on the joints and fever was magical. The diseased heart was only indirectly benefited by the acid; but under digitalis 1x (alcoholic dilution), and sulphur 30, fixed in separate glasses of water and alternated every two hours, the heart's action steadily improved; and the man is living to-day with a sound heart. Sulphur 30 was given alone for a time, and it had a wonderful influence in the closing up of the case.

Why was salicylic acid given? Not from any special indications, not because it was the similar—for it has no action whatever on the joints of a healthy man, but it was given simply because experience had found it beneficial in this type of rheumatism. It will not benefit all cases. It completely fails in some instances; but, nevertheless, it approximates to a specific in acute articular rheumatism.

If the acid does not act promptly after full doses, it will not act at all favorably.

Drugs like pichi and salicylic acid, which act curatively contrary to their pathogenesis, elude our understanding; and that is why characteristic indications for their use cannot be furnished.

OBJECTS OBTAINABLE BY FOOD.

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UNDER "News and Miscellany" in one of our medical journals was this statement: "*Whole* wheat preparations are proved to be richer in life-growing elements than any other single article of food." Of all the true statements in this world, there never was a truer assertion than the above!

But what are we doing this day in regard to our bread foods? We are bolting out certain valuable parts of the grain and throwing it away! Worse than that, we are inflicting very serious injuries in more ways than one upon generations, at least, of the last three decades.

There never was a time in the history of this country when there were so many afflicted with flabby muscular tissue and wretchedly formed teeth as we find to-day. The teeth especially have suffered for want of proper food to build themselves up with. Their soft solids can get material enough to form protoplasm with, but the calcareous matter is not supplied as it should be. The petrous tissues are not up to the standard that they should be to enable them to resist attrition and decay. Hence they are erupted only to melt and dissolve away. It is within the purview—superintendence—of the physician to correct this condition of affairs, to build better than the dentist can repair!

The enamel of the teeth is composed of 98 per cent. of inorganic constituents, the dentine of 78 and cementum of 70 per cent., or *should* be, an

average of 82 per cent. There are thousands of children only eight or ten years of age who have lost their six-year molars, the first molars of the permanent set, and when they have arrived to the twelfth year the bicuspids and molars are seriously affected.

It is not the *soft solids* of tooth structure that enables them to resist disintegrating influences, but the *calcareous matter* that is interspersed between the interstices of the soft solids.

Now, since the teeth have a special time when this is accomplished, it follows that *at that time*, they require to be fed with the lime salts. The teeth commence to form as early as the sixth week from conception. Therefore, the *mother* needs to be fed with calcareous matter, and the *nursing babe* not with lime water or other pharmaceutical preparations, which do not furnish a rightly balanced pabulum that can be appropriated for this specific purpose, but with a food that is rich in the carbonate and phosphate of lime, especially the latter, that has been so *naturally* —not chemically—combined as to be *easily divisible* by the process of digestion, and hence *easily appropriated*. There is a food in which this can be easily accomplished in our various cereals. We *need* the "*whole* wheat," the *whole* of the corn or rye! To get the calcareous matter in our grains we need their *bran*, the immediate outside portions. Here we have the rightly *balanced* proportions out of which to build up decay-resisting, petrous tissues. Cellulose or gluten will not furnish the calcareous salts. Where none of the latter, or very little, is provided there can be but one result, soft, frail teeth, flabby muscles and constipation. Effect will follow cause, physiologically, as surely as in any other manner!

It will be remembered that teeth once built up *are built up forever!*

The mother ought to *eat liberally three times a day* of bread foods that are composed of the *whole* or *unbolted* product of the grain partaken of. Through the *umbilical cord* and mammary glands these calcareous salts should freely pass. To obtain the best results it is *highly important to feed the fœtus*. After the child has got so it can eat, it should receive a liberal portion of oatmeal and of the coarse bread foods.

If the mother is unable to feed her child from the maternal breast, and a wet nurse is employed, great care should be exercised to see that said nurse supplies herself liberally with this variety of food.

There are many infants that are compelled by various circumstances to be brought up on the bottle, and it becomes an important matter for the future welfare of that infant to inquire, What shall be put into that bottle, whether barley and rice water, which contains no calcareous matter, cow's milk, which has a larger proportion of casein than human milk, and which is so difficult to dispose of—disintegrate—that many children cannot digest it, or what is best to use? As for obtaining a good variety of cow's milk in a large city it is impossible to find. In such cases some form of artificial food must be substituted.

If this becomes necessary, we want a food *well supplied* with the *lime salts, easy of digestion*, and that contains a slightly larger amount of the albuminoids than can be found in human milk. *Ease of digestion* and a sufficient amount of the *phosphate* of lime are too important points to be lost sight of. The proportion of the albuminoids, proteins or nitrogenous matter in human milk is 17.08 per cent. The human teeth contain ten times as much of the phosphate of lime as they do of the carbonate. Another important point in feeding children by hand is, that they ought not to be overcrowded!

There are some eight different artificial foods designed for infants now upon the market, and all are different in their composition.

Starches.—Take barley or rice water, farina, corn starch, boiled *bolted* wheat flour, Boston or soda crackers and such kinds of foods, while not only devoid of calcareous matter, they are very difficult of digestion for infants under one year.

The starches are disposed of—digested—by the amyolytic ferments found in the saliva, pancreatic and intestinal juices. Infants do not possess a sufficient amount of these ferments to digest raw starch. They are apt to pass through the intestinal tract, establishing entero-colitis and diarrhœa, removing the mucous epithelium and creating serious bowel lesions. Therefore, any starch that may be in any artificial food should be converted into *dextrine* before it is ingested. Laboratory experiments will soon show that the conversion of starch into dextrine—that is, the breaking up of the starch cells—is a long and difficult process; but the conversion of dextrine into sugar by the former absorbing the last molecule of water, is easily and quickly performed.

The amyolytic ferments of an infant are able to convert dextrine into soluble sugar, but *not* to change starch into dextrine. Therefore, artificial foods that contain unconverted starch are not a proper food for young infants.

Malts.—Maltose or soluble sugar is that form of starch which has received its full conversion.

The hydro-carbons ingested into the stomach as maltose or soluble sugar, meets first the lactic acid and later the hydrochloric acid of the gastric juice, and is liable to be changed into alcoholic, putrid or acetous fermentation, sour beer! So far as infants' artificial food, prepared for the processes of a physiological digestion, are involved, such food *must not* contain raw starch nor malted preparations.

The best artificial foods for infants contain cow's milk, and are known as "milk foods." But such preparations ought to have their desiccated cow's milk partly predigested with pancreatine freshly prepared, and their starches converted into dextrine by baking some eight hours or more at a temperature of 350° to 400° F. If both of these processes are *honestly* attended to, then there will be produced an *easily digesting* food, quite as easily disposed of as is human milk.

Milk Foods.—Three of these eight foods are known as "milk foods." They are Nestle's Food, Anglo-Swiss and Carnrick's Soluble Food. This last-named food contains 18.22 per cent. of albuminoid or nitrogenous matter. Woman's, it will be remembered, has 17.08 per cent., which is an important ingredient in either human or an artificial food. Of the calcareous salts and phosphoric acid, petrous tissue builders, there is respectively: Salts, 2.991; phos. acid, 0.874 per cent., and ease of digestion as high as 16.45 per cent. Anglo-Swiss albuminoids are 12.38; lime salts, 1.95; phos. acid, 0.800, and digestion, 11.20 per cent. Nestle's Food, respectively, is albuminoids, 11.46; salts, 1.75; phos. acid, 0.630, and digestion, 11.09 per cent.

Malt Foods.—Two are known as "malt foods," Horlick's and Mellin's. Horlick's has of the albuminoids 11.30 per cent.; salts, 2.76; phos. acid, 4.21, and ease of digestion, 10.85 per cent. Mellin's Food contains of nitrogenous matter 8.34; salts, 3.00; phos. acid, 0.583, and digestion, 7.38, more than two and a quarter times more difficult to digest than Soluble Food.

Starches.—Of the starch foods, so called for not containing milk or malts, we find Wells, Richardson & Co.'s, whose proteins are 9.05 per cent.; salts, 2.26; phos. acid, 0.688, and digestion, 8.35. Dr. Ridge's Food—albuminoids, 8.76; salts, 0.48; phos. acid, 0.260; and digestion, 7.97 per cent. Imperial Granum's nitrogenous matter is 10.73; tooth builders as low as 0.37 and 0.167, and digestion, 9.55.

Carnrick's Food is certainly the nearest to human milk in *nitrogenous matter* and *ease of digestion.*

In many cases the mother is enabled to nurse her child in part, but in that case she ought to feed herself liberally with the coarse bread foods.

It should not be understood by any teachings in this paper that one pregnant or nursing should eat no other food than above suggested. No, far from it! A mixed diet is especially to be sought after, but, however well selected such a diet may be, there is *no* food with which the writer is acquainted that has been arranged by the Almighty that is so rich in the *necessary* lime salts, and that can be so easily divided and appropriated by the needy tissues as the unbolted products of our cereal grains.

How pertinent are the remarks of a prominent New York physician,* when he says: "The first duty of the physician to the public being the prevention of disease, there can be no more important subject for our consideration in this connection than the influence of diet upon health, and none can more fully appreciate this factor than the physician who is constantly studying the causes of disease and their probable prevention.

"It is universally admitted that the great majority of non-contagious diseases are due to malnutrition." How true this is of the petrous tissues. "And this is largely occasioned primarily by† *errors in diet, which would be preventable through a knowledge of the relative value of foods as nutrients, and of their requirements for digestion.*" Feed the petrous and muscular tissues with lime salts through the umbilical cord, mammary glands or by the bottle, not forgetting the child and the youth!

RESUME OF SURGICAL WORK AT WARD'S ISLAND HOSPITAL FROM NOV. 1, '87, TO MAY 1, '88.

BY FRANCIS B. KELLOGG, M. D.,
HOUSE SURGEON.

THE past six months at the above hospital have been fruitful in an unusually large number of important and interesting surgical operations. The male surgical ward, numbering 92 beds, and the female, numbering 80, both belong to the same service, and include all the gynecological and ophthalmic cases. The wards have been so crowded that there has scarcely been a time during this whole period when the combined census has not exceeded two hundred.

The following resumé is given in order that the value of the surgical service to the interne at the Ward's Island Hospital may be properly estimated, and the nature and amount of its surgical

* Alfred K. Hills, M. D.
† Italics by the subscriber.

work properly appreciated by the profession at large.

During the months of November and December there was little of importance except the removal of a large myo-fibromo of the uterus, weighing fifteen pounds, by Dr. Helmuth, and reported by the writer in the *Chironian* for December 15th, 1887.

On January 26th, Dr. E. Carleton held a surgical clinic at the hospital for the benefit of his class in the women's college, performing a modified Wood's operation upon a large inguinal hernia, breaking up an anchylosis of the elbow joint and performing several minor operations.

During the months of January and February, Dr. H. I. Ostrom removed the upper four inches of the ulna for caries, and scraped the tibia extensively in an ulcer involving caries of that bone. MacEwen's operation was performed upon an umbilical hernia, and Alexander's operation upon a prolapsed uterus. The right breast was excised for the removal of a large scirrhous carcinoma; an ovariotomy and three trachelorraphies were performed.

During these two months the house surgeon performed an amputation of all the toes; an operation for the radical cure of hernia; one for radical cure of hydrocele; reduced two dislocated shoulders; circumcised twice and amputated several digits.

During the months of March and April, Dr. E. G. Rankin, in the male ward, amputated both great toes, removing with one a part of the metalorsal bone; operated upon a perineal urethral fistula, complicated by five additional fistulæ, one of which communicated with a pus pocket in the abdominal muscles; removed one-half of the sixth rib and scraped the fifth and fourth for caries; performed Wood's operation for inguinal hernia, and amputated the thigh at the middle third.

Dr. Arthur T. Hills, in the female ward, performed a similar amputation at the thigh; removed a section of carious bone from the cranium; operated upon a prolapsed rectum by Van Buren's method; performed two tracheolorraphies, and removed the left ovary.

The house surgeon, with the consent and in several cases the assistance of the visiting surgeons, performed the following operations: Excision of the metalarsal bones from the stump of left foot after removal of gangrenous toes; radical operation for empyema; amputation of four great toes and one small one; enucleation of two sebaceous cysts, one from the back of the neck, the other from the scalp; amputation of six fingers; two trachelorraphies; removal of tuberosity of os calcis and scraping of the same for necrosis, and amputation of the leg at the middle third.

Many of the cases were of exceeding interest, but the design of this paper is simply to show the amount and nature of the work done, rather than to enter into details of the individual cases.

The value of the service to the house surgeon is evident. The distance of the hospital from the city is such, and the time of the visiting surgeons in consequence so limited, that all the minor and some of the more important surgery, of necessity falls to him. Still more of his invaluable experience does he owe to the interest and courtesy of his visiting surgeons, and the writer feels particularly grateful for the advantages he has derived from this source. The experience of a medical nature, as distinguished from surgical, in so large a ward is necessarily varied and valuable, covering to a degree all the principal organic lesions and diseases which are found in greater numbers in the medical wards proper, but the surgical experience imparts a familiarity with, and a fearlessness in the use of, instruments invaluable to the general practitioner, and enabling him to hold cases and adopt measures in his private practice with a confidence which he would otherwise lack.

CLINIQUE.

ANOREXIA NERVOSA.

By W. F. Robinson, M. D., Vienna.

IT IS a well known fact to all medical observers of the present day that in this age of overstrain and high pressure in which we are now living functional nervous diseases of all kinds are becoming more and more frequent, and are therefore attracting a greater share of the physicians attention. The disease, neurasthenia, has only been known for a few years as such, and yet we already know that it is not a single morbid condition, but includes on the contrary several distinct ailments as cerebral neurasthenia, cardiac neurasthenia, etc., whose number may be still further increased as our knowledge of the disease extends itself. As a further proof of the investigation going on in this department of medicine, may be mentioned the disease whose name stands at the head of this article, for a knowledge of which we are mostly indebted to our English confréres. Although it is possible that anorexia nervosa might be denied the right to an independent existence by the rigid stickler for scientific nomen-

clature, it may be confidentally asserted that it marks an advance in our knowledge of functional disease and that as a clinical contribution to medical science it is by no means without value. As to the nature of this disease it may be said that it is a purely functional trouble as far as is yet known, like neuralgia or epilepsy, without any organ lesion whatever, but it is not to be lightly considered on this account for its consequences may be of the gravest character. To borrow the words of a prominent English author, "It belongs to those types of disease which are daily increasing in frequency in this age of culture, overstrain and pressure, and which doom the unhappy sufferer to untold misery." It is indeed a question if diseases of this character are not even worse than cancer, tuberculosis and other fatal organic affections which bring in a comparatively short space of time release from suffering through death, whereas the unhappy victim of disordered nerves may be doomed to a life of wretchedness in which he is unable either to work or to enjoy and is capable of little else than suffering.

Coming now to the actual symptoms of anorexia nervosa, we find the principal one to be an unconquerable disgust for food which is so great that the patient really eats little or nothing, and as a natural result soon becomes greatly emaciated. Vague feelings of discomfort are sometimes complained of when food is taken, although severe symptoms, such as vomiting, excessive pain and the like, which might lead to susception of organic disease are always absent. The disease is a functional one in the fullest sense of the word, and if organic changes are found sufficient to account for the symptoms the diagnosis of anorexia nervosa must be immediately given up.

In addition to the disgust for food and emaciation we find as a constant symptom a persistent restlessness and uneasiness, so that the patients will stay but a short time in one position and are ever changing from chair to sofa or else walking around the room.

One patient who was being treated for this affection in a hospital would get out of bed as soon as the nurse's back was turned and stand in the middle of the floor until her action was noticed and she was again led back to her couch.

The disease is observed mostly in women, although cases occurring in men are not by any means unknown. In the case of women amenorrhœa always appears sooner or later as a natural consequence of the inanition, and obstinate constipation is also an almost constant symptom in both sexes.

All sorts of symptoms partaking more or less of a neurasthonic or hysterial nature, according to the temperament of the individual, may appear, but the few principal ones which determine the character of the disease are those mentioned above.

The following typical case may be cited, being of particular interest from the fact that it occurred in the practice of the great English physician, Sir William Gull, whose acknowledged reputation and ability naturally give weight to any statements which he makes.

The patient was a young girl, fourteen years old, plump and well, up to the time of her illness. Upon the first examination the patient was found to be fearfully emaciated, having eaten scarcely anything for two months. Extremities, blue and cold. Temperature, 97 degrees. Pulse, 46 beats to the minute. Urine, normal. The examination revealed no organic disease, and the patient declared herself that she was quite well; which last statement, it need hardly be said, was very far from the truth.

A professional nurse was obtained for the patient, and light food ordered to be given her, which was gradually changed in quality and increased in quantity as the cure progressed. The improvement was steady and uninterrupted, and in two months from the commencement of the treatment the patient was restored to her former plump, well nourished condition, and practically cured.

Numbers of cases similar to this, have been and are still being published in medical journals, but one typical case will suffice without taking up space to report others. As to the treatment of this affection there is but one principal indication, namely, to induce the patient to take food. If this can be carried out successfully at home, as in Sir Wm. Gull's case, well and good; if not it is absolutely essential that the patient be removed to some institution away from the injudicious sympathy of friends and relatives, and where the doctor's orders can be rigidly enforced. Dr. W. S. Playfair, of London, who has had large experience in this disease, declares that every case, if properly treated can be cured and his experience seem to be born out by other writers.

Playfair himself recommends the method of enforced rest, massage and overfeeding introduced by Wier Mitchell, of Philadelphia, which is very natural owing to the fact that he is the most enthusiastic supporter of this method of treatment in England.

Although this method is of undoubted value there is no reason for supposing it to be neces-

sary in the treatment of every case and being expensive and often difficult to carry out, it should rather be kept in reserve and the simpler and more natural methods first tried.

The causes of this trouble are manifold, among which may be mentioned overstudy, especially to be seen in the pernicious practice of "cramming" for examinations, and excessive physical exertion as often occurs in training for contests in running, boat-racing and the like. Emotional cases such as money-losses and disappointments in love, also come in as causative factors.

Moreover the disease is undoubtedly fostered by injudicious sympathy as well as overmuch and unwise doctoring.

A full and exhaustive discussion of the various causes direct and indirect, which are, at the present day, producing this and other forms of functional nervous disease, would form sufficient material for an article in itself and therefore will not be attempted in this paper, which is only intended for clinical study.

In closing, let me dwell for a moment on what seems to me the point of greatest clinical importance in the whole matter, namely: That a purely functional disease depending upon a derangement of the higher faculties of the mind, as the will or the moral force, may in certain instances present a complete picture of organic lesion in all its details, which might easily baffle an experienced observer.

It can hardly be doubted that if a physician of the previous century could be awakened from his long sleep and suddenly shown a case of anorexia nervosa, similar to the one cited in this article, with frightful emaciation, amenorrhœa, cold extremeties, etc., he would unhesitatingly pronounce it to be serious organic disease in its last stage, and predict a speedy and fatal termination without hope of medical aid.

We have learned to know, however, that this opinion would be entirely wrong; that the disease is not organic, and that far from being beyond the reach of medical aid, it is susceptible, through properly directed treatment, of rapid and permanent cure.

This, then, is the important point for us to bear in mind, the recognition of grave functional disease, as such, and the prompt application of proper treatment. Let us learn to realize that the character of disease is changing with the times, and that morbid conditions may now be met with which would have been impossible fifty years ago.

Let us then as intelligent and conscienscious physicians, recognise the fact that changes are occurring, and let us study to learn their nature, in order that we may better know how to treat and cure them.

A CLINICAL STUDY OF VIOLA ODORATA.*

By Dr. C. E. Laning, Chicago, Ill.

I HAVE but seldom seen this remedy mentioned in our literature, perhaps for the reason that it is not often indicated, nevertheless it is of considerable value at times, and should not be overlooked. Of the diseases of childhood, in which it is most frequently indicated, I will mention pertussis, measles, and worm affections, or an irritable state of the gastro-intestinal canal simulating verminous troubles.

In adults it is not to be lost sight of in hysteria, resembling both *ignatia* and *pulsatilla*, being a cross between them, so to speak, and at times acting well when neither of these remedies avail, although both may apparently be more or less indicated.

It is to be studied in cardiac affections, accompanied by much palpitation, in dyspnœa, and at times œdematous swelling of the lower limbs, pointing to more than a functional derangement of the great central organ of the circulation. The œdematous condition referred to does not of necessity indicate a cardiac lesion, for the action of the drug upon the hepatic and renal circulation is such as might at times account for the œdema.

In enuresis nocturna I have found it to act most satisfactorily in a certain class of cases. Generally these patients have been thin, nervous children, who, partly from mal-nutrition, and partly as a result of over exertion during the day, are completely exhausted at night, are fretful and peevish as a consequence, and their sleep is uneasy. The urine voided during the night has a peculiar odor, not so strong as the benzoic acid, nitric acid, or jodium urine, but is of such a character as to indicate a derangement of the mucous coat of the bladder.

It would appear to resemble both the last named remedies and *sepia* or *calcarea carbonica* as regards its action on the vesical mucosa. Accompanying this symptom will usually be found, as a concomitant, great nervous exhaustion. The child as a result of this, acts as is characteristic of certain forms of nervous debility, viz., It runs and plays violently for a time, and then drops down almost anywhere, completely exhausted. The fact is too frequently overlooked, that neurasthenia in its

* *The Clinique.*

worst form is sometimes made manifest by an inordinate desire on the part of these patients to work or play or exert themselves to the uttermost in some one direction. These are often the worst cases, far worse than those who, through debility, desire to remain inactive, mentally and physically.

Viola od. belongs to the first class of cases, and *phosphoric acid* and *sepia* to the latter. The urine is said to have the odor of violets from poisoning by this drug, as well as by *terebinth*, but I have never seen such a case.

In measles I have occasionally found this remedy useful, when the child was very restless and uneasy, and the eruption did not make its appearance at the proper time and in the proper manner. Repercussion of the eruption also calls for *viola*, though not so often as for *bryonia, veratrum viride* or *cantharis;* and when the eruption is faint and the face is flushed, with evidence of cerebral hyperæmia, similar to that of *belladonna*, and the skin is dry and hot, as one would expect to find in an *aconite* patient. One peculiarity in such cases is, that the palms of the hands are quite moist while the rest of the body is dry. This is not always the case, but I have observed it a few times, and in all cases calling for this remedy this condition is likely to occur. During the catarrhal stage of measles the expectoration is often profuse, especially in the case of children who can raise the mucus. In younger ones the same excessive secretion occurs, as shown by the frequent attacks of dyspnœa and suffocation, for as a rule the sputa is tough and stringy, resembling that of *kali bich.* and *hydrastis.* Sometimes it is lumpy and jelly-like, which shows an involvement of the larynx, particularly of the pouches of Morgagni. This latter symptom accounts for the aphonia which usually accompanies the catarrhal stage, and which sometimes lingers after the other symptoms have disappeared.

In pertussis this hoarseness is often quite prominent, the fits of coughing are violent, spasmodic and protracted, resembling those of *coralium rubrum.*

When indicated in helminthiasis it suits children of a fair complexion, tearful and nervous temperament, especially those who are troubled with enuresis. For obvious reasons *pulsatilla* is often prescribed instead of *viola* for these symptoms. The *viola* patient dislikes the cool air, is easily chilled, craves lean and fat meat in large quantities (*nitric ac.* and *nux vomica*). Like the teucrium patient, the little sufferer is annoyed with intolerable itching at the anus, particularly in the afternoon and evening. As regards the patient's disposition, *viola* differs from *cina* in being mild and tearful instead of irritable and ugly. Both have the anal pruritus, and the *viola* patient bores and rubs at the nose as the *cina* child does.

Viola causes, or at least cures, the "milky urine" which is generally considered to be indicative of worms, but which is not an unfailing sign of their presence in the *primæ viæ.* This kind of urine, which depends upon an excess of the urate of soda, is indicative of intestinal irritation and imperfect digestion. As a rule, those remedies which derange the digestive function in such a way as to produce the urate of soda in excess, cause more or less bloating of the abdomen, and to this rule *viola* is no exception. In such cases the liver is always functionally involved, and one of the consequences of this derangement under *viola* is an aphthous condition, with constipation upward pressure upon the diaphragm and a resulting dyspnœa. This furnishes a leading idication for the remedy, and explains its action through the vagus.

Another clinical point concerns the efficacy of *viola* in hysteria and phthisis. In young girls who at puberty develop hysterical symptoms, especially if the menstrual flow is delayed and irregular and they are of a tuberculous diathesis, the *viola odorata* should not be overlooked. The patient complains of dyspnœa, from tightness of the chest, or from a feeling of a heavy weight upon the thorax, in which it resembles *phosphorus.* It is also suited to tall, thin, light-haired, nervous people, who are predisposed to phthisis. *Sulphur* resembles it in a general way.

To resume; we should not forget the *viola odorata* in enuresis nocturna, helminthiasis, pertussis convulsiva, rubeola, and, for the older patients, amenorrhœa and irregular menstration when accompanied by frequent hysterical attacks in a tuberculous patient.

Proper and Improper Vaccination (*Lancet*, May 14, 1887).—A recent discussion by the Society of Medical Officers of Health showed that vaccination was often credited with a failure to protect against smallpox simply because it had been inefficiently performed.

The Local Government Board have endeavored to raise the standard in this respect. Their instructions state definitely that at least four separate, good-sized vesicles, or groups of vesicles, should be made, so that the total area of vesiculation should not be less than half a square inch. This recommendation is based upon the experience of many years, and the evidence which every smallpox hospital affords, that the severity of smallpox in the vaccinated is inversely proportionate to the number of cicatrices.

"SURGICAL MEMORANDA."

By Arthur T. Hills, M. D.

Surgeon to Ward's Island Hospital and to the Home of the Good Samaritan Diakonissen, New York.

A novel method of reducing sub-glenoid dislocation of the shoulder is by fixing the humerus and making the glenoid cavity descend upon it. It is claimed that this method is most simple, easily and quickly done; that chloroform is not necessary to obtain muscular relaxation; that the pain is trifling, and that no assistants are required. The patient is made to stand with a crutch in his axilla; the surgeon holds the hand of the affected side, making slight traction downwards; the patient is now to let himself down, as if he was going to fall on his knees; and, as he falls, the head of the humerus glides into its normal position.

Dr. Lange, of New York, considers the injection of hemorrhoids one of the best methods of proceedure; he performs it in the following manner: The rectum is first thoroughly emptied, then the piles are brought down, and, after applying iodoform ointment to the mass, a solution of carbolic acid, more or less concentrated, according to circumstances, should be slowly injected. Some surgeons use equal parts of glycerine and carbolic acid. In the case of large hemorrhoids, it is necessary to turn the point of the needle in various directions; the patient makes a better recovery by remaining quiet for several days. After injection, the tumors begin to swell somewhat rapidly, and assume a glass-like appearance. In the case of internal hemorrhoids, the operation is painless, but in external hemorrhoids, sharp pain generally comes on suddenly half an hour afterwards. This should be relieved by suppositories. The patient is generally well the next day. The operation is generally repeated at intervals of three or four weeks. Dr. Lange has never observed any ill effects, except slight sloughing. In case of bleeding piles, it is advisable to seek for the spots from which the hemorrhage came and to inject at these points, as the patient recovers more quickly than when the puncture is made at another spot.

It is claimed that a radical cure of fistula in ano results from first tracing the fistula with flexible probe, then washing out the track with a 5 per cent. solution of "hydrogen peroxide." Then inject a 95 per cent. solution of carbolic acid plus an equal quantity of a 10 per cent. solution muriate of cocaine. Draw about ten to fifteen minims into the syringe. Push the flexible needle to the depth of the fistula, then inject slowly as you withdraw the needle. Within two hours inject oleum eucalyptus and glycerine, equal parts, which finishes the operation. Keep patient quiet for forty-eight hours.

A form of treatment for chronic ulcer of the leg, without rest, allowing the patient to follow his usual employment, is most desirable. The following, it is said, fulfils these indications: First, The whole leg is most carefully washed with soap, shaved, and brushed with sulph. ether. Then the ulcer is carefully disinfected with a three per cent. carbolic solution, applied by cloths dipped in it, which are kept on for half a day. The leg is then carefully dried and strapped, the straps crossing in front and overlapping at the edges. The straps should be from 1½ to 2 inches in width. Above the strapping, eight layers of carbolic gauze should be laid and fastened with a muslin bandage. On each second day the bandage is taken off, and the carbolic gauze, especially over the situation of the ulcer, is thoroughly sprayed with a twenty per cent. solution of carbolic acid, and a fresh bandage is applied.

This treatment should be continued for four weeks. On removing the whole dressing, the ulcer is found, in most cases, completely healed up, and should a small spot remain, a continuance of the treatment is indicated.

Surgical cleanliness of the hands has become an important factor in the success of surgical proceedure, as demonstrated by Kümmel and confirmed by Fürbinger. He has directed his attention to what he calls the sub-ungual region of the finger—that is, the area between the free margin of the nail and the dorsal surface of the tip of the finger, a region which surgeons know is the most difficult to disinfect of all parts of the hand. They reach the following conclusion:—

(I.) That alcohol (at least 80 per cent.) is absolutely essential to a perfect disinfection of the hands, since it favors the adhesion of the antiseptic solution to the epidermis.

(II.) In order to attain perfect antisepsis, the three factors—soap, alcohol and sublimate solution—must be present. The technique is as follows:

(1.) The nails are freed in a dry manner of all visible dirt.

(2.) The hands, particularly the sub-ungual area, are brushed for a minute with soap and warm water.

(3.) They are then dipped for a minute in 80 per cent. alcohol.

(4.) Immediately, before the evaporation of the alcohol, they are washed in the antiseptic solution of sublimate 2 per cent. or carbolic acid 3 per cent.

Sub-cortical abscess of the brain has been relieved by widening the fracture of the skull with a chisel and hammer, dividing the exposed dura mater, and cutting down upon the abscess with a deep cross incision. A copious discharge of pus followed antiseptic wash, future drainage, and dressing. The paralysis of right facial nerve and the right upper extremity immediately disappeared. The patient recovered completely.

Dr. Lewin describes a new local anesthetic of surprising power and rapidity—hayah or erythroflein. It is surmised that it will rival cocaine. It is of African origin. A drop or two of an aqueous solution placed in the eye of a cat renders the organ absolutely insensible in fifteen minutes, and remains more or less so for from ten to twenty-four hours. We await further developments with great interest.

Aluminum as Cheap as Copper.—Experiments at Newport, Ky., the details of which were recently made public, have resulted in an extraordinary discovery, if the statements made by those interested can be relied upon. The discovery is that aluminum, which now costs $20,000 a ton and is produced only in France, can be obtained anywhere by a most simple process and at less than one-hundreth part the present expense. The importance of this discovery can be judged when it is recollected that aluminum is the most generally diffused metal on earth, and has all the beauty of silver, besides being non-tarnishing, non-corrosive, more lasting than silver, with only one-fourth its weight. In addition, aluminum alloyed one-tenth of one per cent. with iron or steel increases the homogeneous and tensile strength of the metal nearly half, while for electro-plating purposes aluminum is superior to either gold or silver. The experiments began in an attempt to

extract aluminum chemically from common clay and cryolite. This was accomplished in a novel manner, and the operators obtained thereby metallic aluminum chemically pure. Their method was based upon the theory of substitution and smelting the ore in a water-jacketed steel furnace, a crucible being useless to resist the strong fluoride fluxes. When the mass was quite liquid, it was conveyed into a converter or covered slag pot, holding about 400 pounds, and the aluminum extracted therefrom by a syphon tap. The slag was returned to the furnace, serving the purpose of a flux, with more ore. This direct, continuous process obviated the necessity of the usual costly intermediary elements, and made the aluminum about as cheap as copper.

Carbonate of Lime for Cancer.—*The London Lancet* calls attention to Dr. Hood's twenty years' experience of the value of carbonate of lime, in the form of calcined oyster shells, as a means of arresting the growth of cancerous tumors—the result attained having been extremely satisfactory. Reference is made to several cases in which a persevering use of calcined shell powder arrested the growth and pain in tumors undoubtedly of a cancerous character, and this being the case, the persistent trial of the remedy is urged in all cases where the nature of the affection is easily recognized.

It is of no possible use in any case in which it is not indicated by the symptoms and this Hahnemann pointed out long ago.

Practical Hints on Disinfection.—The following is from "Disease Germs and How to Combat Them," by Lucius Pitkin, in *The Century* for July, accompanied by a frontispiece portrait of Pasteur.

1st. Corrosive sublimate (mercuric chloride), sulphate of copper, and chloride of lime are among our best disinfectants, the first two being poisonous. At wholesale drug houses in New York single pounds can be obtained, mercuric chloride costing seventy-five cents, the other ten cents a pound.

2d. A quarter of a pound of corrosive sublimate and a pound of sulphate of copper in one gallon of water makes a concentrated solution to keep in stock. We will refer to it as "solution A."

3d. For the ordinary disinfecting solution add half a pint of "solution A." to a gallon of water. This, while costing less than a cent and a half per gallon, is a good strength for general use. Use in about equal quantity in disinfecting choleraic or typhoid fever excreta.

4th. A four per cent. solution of good chloride of lime or a quarter pint of "solution A" to a gallon of water is used to wash wood work floors, and wooden furniture, after fumigation and ventilation.

5th. For fumigating with sulphur, three to four pounds should be used to every thousand cubic feet air space. Burn in an old tin basin floating in a tub of water; keep room closed twelve hours, to allow the fumes to penetrate all cracks. Then open a window from the outside and allow fumes to escape into air.

6th. Soak sheets, etc., in chloride of lime solution, wring out, and boil.

7th. Cesspools, etc., should be well covered on top with a mixture of chloride of lime with ten parts of dry sand.

8th. Isolate the patient in an upper room from which curtains, carpets, and stuffed furniture have been removed.

9th. The solution of mercuric chloride must not be placed in metal vessels, since the mercury would plate them.

Sensibility of the Skin.—It is a matter of general surprise that would-be suicides are not dissuaded from cutting their throats by the intense pain naturally considered inherent in the tissues.

In searching for the explanation of this fact, Prof. Brown-Séquard has proven that the slightest incision in the cervical region immediately destroys the sensibility of the anterior half of the neck, in all of its thickness; and also a sudden mechanical irritation of the skin of the neck and larynx causes a paralysis of the great nerve centres, and consequent cessation of respiration and circulation.

In this way death by hanging, without suffocation, can be explained.

A Novel Symptom in Wasting Diseases.—The sulphocyanide of potassium in the saliva has been found by Fenwick to be reduced in amount or altogether absent in wasting diseases, such as phthisis, and the later stages of malignant disease, as well as in fevers. This may prove of use in the diagnosis of gastric cancer.

A sudden diminution indicates a depression in the vital powers. The only available method of guaging its amount is by measuring the intensity of the color when perchloride of iron is added.

It has been suggested that this may prove of value in making examinations for life insurance, especially where there is a deficiency of weight, associated with gastric symptoms.

A New Treatment of Sterility.—In an article upon "The Obstacles to Fecundity in the Human Species" (*Journal de Medicine*, May 16, 1886), Professor Pajot says: "Has the woman an ante-version? Say to her: 'Have the kindness, if you please, every evening when you expect to have intercourse with your husband, not to urinate for five or six hours. Don't ask why; that doesn't concern you. Only don't urinate. You wish to have children? Yes? Well, then urinate after intercourse and not before.' If she has a retroversion, say to her: 'Madame, when your menses are over, eat plenty of eggs and plenty of rice. Take every night for three or four days a little pill which I am going to give you.' (This little pill contains simply a third of a grain of extract of opium.) 'Manage not to go to stool for three or four days. Then have intercourse with your husband, but don't go to stool till afterwards.' You will say that all this is very ridiculous; yet the whole process is entirely rational and is based upon anatomical and physiological principles."

Egg Inflammation.—Dr. D. F. Wright (*State Board of Health Bulletin*, Nashville), says that the adhesion of the yolk to the shell of the egg, so that the egg cannot be turned out without breaking the yolk, is the result of a true inflammation caused by the shaking of the cars or wagons in which the eggs are carried. He thinks such eggs must be unhealthy. As eggs are frequently prescribed raw, it would be well to caution the housewife, who generally depends on her nose for a correct diagnosis of the healthfullness of an egg.

The New York Medical Times.

A MONTHLY JOURNAL

OF

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EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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PTOMAINES AND LEUCOMAINES.*

THE heat of summer and the humidity of the spring and fall months direct our attention specially to the poisons formed in the body through peculiar conditions of the system, and those taken into the stomach in the food in which they have been generated through atmospheric influences, notably heat and moisture. In the very excellent work of Professors Vaughan and Nory we find these subjects discussed with the scientific accuracy and fullness of information obtained by careful experimentation and extensive and pains-taking gleanings from the literature of the subjects. Ptomaines may be called putrefactive alkaloids, and are formed by the putrefaction of animal and vegetable matter. They are temporary forms through which matter passes while it is being transformed by the activity of bacterial life from the organic to the inorganic state, and are therefore the transition products in the process of putrefaction. Complex organic substances, as muscle and brain, are broken up into less complex molecules, and so the process of chemical division goes on until the simple and well-known final products, carbonic acid gas, ammonia and water, are the result; but the variety of combination into which an individual atom of carbon may enter during this long series of changes is almost unlimited, and with each change in combination there is more or less change in nature. In one combination the atom of carbon may exist as a constituent of a highly poisonous substance, while the next combination may be wholly inert.

In 1856 Panum published his investigations of the poisons produced by putrefaction. He demonstrated that a fixed poison was obtained from the decomposing flesh of a dog, which was not destroyed by boiling or evaporation, but that it preserved its poisonous properties even after the boiling had been continued for eleven hours and the evaporation had been carried to complete dessiccation at a heat of 227°. The putrid poison is insoluble in absolute alcohol, but soluble in water. The intensity of the putrid poison is comparable to that of the venom of serpents and of certain vegetable alkaloids, inasmuch as 0.012 of a grain of the poison was sufficient to kill a small dog.

The symptoms observed varied greatly with the quantity of the poison used and the strength of the animal. After the injection of large doses death followed in a short time. In these cases there were violent cramps and involuntary evacuations of the urine and feces; the respiration was labored, the pallor marked, sometimes followed by cyanosis; the pulse feeble, the pupils widely dilated and the eyes projected. Post-mortem putrefaction came on rapidly. In addition to the putrid poison, Panum obtained a narcotic substance which produces a quiet but profound sleep.

Highly poisonous ptomaines have been isolated in ham, sausages, muscles, cheese, milk, ice cream, meal and bread, and in canned goods when decomposition had commenced, sometimes causing the death of those who have partaken of the food. In numerous cases recently where violent symptoms have followed the use of milk, ice cream and cheese, tyrotoxicon, one of the poisonous ptomaines, has been found in the articles used. Precisely how the poison is formed it is impossible with our present knowledge to say, but enough has been discovered to show that if the milk is cooled properly

* "Ptomaines and Leucomaines, or the Putrefactive and Physiological Alkaloids." By Victor C. Vaughan and Frederick G. Nory. Philadelphia, Lea Brothers.

immediately after being taken from the cow, there is no danger of that rapid fermentation which produces in its change tyrotoxicon.

So many diseases now are traced to special micro-organisms, the question how they produce disease is one of great interest. One theory after another has been presented and dismissed as failing to account for the peculiar conditions found in the diseased organism, but the theory which is by far the most plausible, and which is now generally received, is that the bacillus is first produced by causes acting upon the system, such as atmospheric changes and the introduction of specific germs in food, drink and air, and produce the ptomaines or chemical poison by splitting up pre-existing complex compounds in the body. In some of these diseases a very small number of bacteria seem to be able to produce a poison of great intensity. In typhoid fever the bacillus multiplies in the intestines and forms the poison, the absorption of which is followed by the rise of temperature and other symptoms of the disease. If a majority of cases of cholera infantum can be traced to tyrotoxicon, a ptomaine produced by a fermentation in the milk or farinaceous food used, we have, at least, a clue to its partial prevention and a hint as to the most effective treatment.

Poisonous ptomaines which have been found in the cadaver have more than once been mistaken for intensely poisonous vegetable alkaloids. In a trial which took place in Braunschweig, in 1874, two chemists discovered in a body arsenic and an alkaloid which they pronounced coniine. The matter was referred to Otto, who isolated the poison, which proved to be of such a deadly poisonous nature as to preclude the idea of its being coniine, or any other alkaloid with which he was acquainted. Selmi frequently found coniine-like substances in decomposing animal tissue, and called these alkaloids, produced by the oxidation of certain fixed ptomaines or by the action of different amido-bases or volatile fatty acids, "cadaveric coniine." Huseman says it is very difficult, if not impossible, for the chemist to state with certainty that he has found true coniine in the dead body. Ptomaines giving reactions similar to strychnine, and also causing tetanic spasms, have been found in Italy in decomposed corn meal, and a similar ptomaine was found in a decomposing body answering to all the chemical tests of strychnine, but failing to produce tetanic convulsion. In a trial in Italy the chemists confounded a ptomaine with morphine, as it corresponded in every test excepting the ferric chloride and the Pellagri tests. Nearly all the vegetable alkaloids have their counterparts in the poisonous ptomaines produced by the changes of animal and vegetable tissues by putrefaction and fermentation, so that the utmost care is necessary to discriminate between them.

Under the head of Leucomaines are included all those basic substances formed in animal tissues during normal life in contradistinction to the ptomaines or basic products of putrefaction. When we consider that, without an exception, the excretion of plants and animals are poisonous to the organism which excrete them, we get a clue to the cause of a great deal of suffering, in the fact that a disturbance between the rate of formation of the poisons and their excretions, lead by their absorption to a corresponding disturbance of health. We know these poisons are formed in the body, but precisely how they are formed in the breaking up of the proteid molecule is as yet a mystery. The poisons will differ in intensity according to the proteid which is acted upon, and according to the force which acts. Peptones represent the first step in the breaking up of the proteid molecule, and, if injected into the general circulation, act as powerful poisons, but in health they do not reach the general circulation but are robbed of their poisonous properties by being converted into globules. When the liver fails to a certain extent in its function and the peptones are poured into the portal circulation faster than it can convert them into globuline, a portion of the peptones are taken into the general circulation, producing by themselves or the formation of leucomaines, or poisonous alkaloids, lassitude, dullness of the head and the general disturbance of the system, popularly called biliousness and dyspepsia.

Bouchard has shown that normal fæces contain

a highly poisonous substance and estimates that the amount of poisonous alkaloids formed in the intestines of a healthy man during twenty-four hours would be quite sufficient to kill were it all absorbed. Every physician and surgeon has found how speedily at times a fever would subside which threatened typhoid or septicæmia when the abundance of poisonous alkaloids retained in the intestines were removed by free purgation. The old idea that uremic poisoning is occasioned by the retention of urea has given way to experiments which show that no serious results follow the injection of urea into the system. The urine contains substances a thousand times more poisonous than urea, and if the urea is retained, these are also, and we judge the amount of danger by the retention of urea, which can easily be estimated.

The experiments of our ablest scientists, the reasoning of our most practical thinkers in every department of our profession substantiate more and more clearly that the only road to the correct diagnosis of disease, its prevention and relief, is in the study of the changes ever going on in dead and living matter, and the selection of remedies through their pathognegetic action on the living organism.

WILL the sanitarian or the pathologist tell us why there is a steady increase in certain localities of local diseases? In Bright's disease, for instance, we find, in looking over the tables of the Board of Health of Massachusetts, the mortality in that State was in 1850 1.1 per 2,000 of total deaths; in 1860, 2.19 per 1,000; in 1870, 10.5; in 1880, 19.7, and in 1886, 30.5. In New York, notwithstanding the steady improvement in the construction and ventilation of dwellings, diphtheria is on the increase, and all over the country comes complaints of malaria as the fruitful source of a host of diseases which undermine the constitution and make life miserable. And yet, if typhus fever, cholera, yellow fever, and smallpox can be stamped out and kept out by well-known scientific means and precautions, we have reason to expect that, when as much attention has been given to the cause and habits of the more common, but less suddenly fatal diseases, they, too, can be kept at bay. Our journals teem with rare cases in surgery and practice, occurring once in a lifetime, but of far less importance to the public than the careful study of our common every day diseases.

M. ROGER read an exceedingly interesting and instructive paper before the Paris Biological Society, May 12, narrating the results of extensive experiments in the laboratory of M. Bouchard, on the increased poisonous power of substances of opposite physiological action when administered together. The general belief that the toxicity of one counteracts that of the other, and to a certain extent diminishes its power, is shown not only to be incorrect, but precisely the opposite results are produced, the action of each drug being intensified by the combination. Four drugs were experimented upon—morphine, atropine, quinine and potassium chloride, the toxic index of each drug having just been obtained by experiment. It was found when atropine and morphine were administered together in lethal doses of each, but so combined that, by our old process of reasoning, the physiological action of each drug should have counteracted each other, the power of both drugs, as shown by results, was doubled. When quinine and the chloride of potassium was administered together, the toxicity of the mixture was more than double than when administered separately. These experiments show how prone we are to jump at conclusions which further experiments show to be entirely wrong.

THE DOSIMETRIC boom has reached this country and is fast being substituted for the old polypharmacy, which has had a good long day. As we have said before it is a great improvement over the old compounds in the way of dose, and we shall be glad to see it take the place of superannuated medication.

The small doses of the dosimetric method will eventually compel its prescribers to individualize their cases, or else they will drop into polypharmacy again.

We do not see that there is anything gained by using the particular preparations which the advocates of this method urge, over the tablet trit-

urates or saturates which have come into almost universal use in this country, and which are approved so highly by all who use them. Perhaps the Chanteaud granules, may make a convenient stepping stone to smaller doses for some, and we hail its advent as a favorable omen to progressive and exact medication, and in the direction of the single remedy and the minimum dose, and the application in accordance with the *dual* action will come as a matter of course, sooner or later.

DYSLEXIA has been applied to a symptom characterised by a dread of reading, because of unbearable sensations which accompany the act. It has been found to be an evidence of cerebral disease, and in every case noted so far, death from such disease has invariably followed. A case recently reported by Nieden in a foreign exchange (*Deutsche Med. Zeitung*) occurred suddenly in a man who had enjoyed previous good health. He was suddenly seized one morning with violent clonic convulsions, from which he quickly recovered to be attacked eight days later in the same manner. After the second attack it became impossible for him to read because of the unbearable sensations produced. An examination of the eyes detected no great abnormality. This symptom remained for several months, the patient continuing in apparently excellent health.

He then exhibited gastric disturbances which were accompanied by a rapid emaciation and also by headache, lassitude and insomnia, followed by stupor, and two days later by death. An autopsy revealed the lesions of the three apoplectic attacks in blood clots on the brain; no specific lesions explaining the dyslexia were observed.

DR. GRANDIN gives in the *N. Y. Medical Journal* his experience in the use of antipyrine and chloral in labor. He gives fifteen grains of antipyrine, repeating the dose in an hour. In two hours after the second dose the patient receives ten grains and so on every two hours if needed. The chloral is administered in fifteen grain doses every three-quarters of an hour till three or four doses have been taken. The result of this combination has been to nullify the pains to such an extent that they are simply uncomfortable. No injury results to the mother or child. In the majority of cases this treatment will not be likely to supercede chloroform.

NO summer charity in New York is productive of so much good as the St. John's Floating Hospital, which will make four trips a week to its Seaside Hospital, on the south side of Staten Island, during the entire summer. The hospital boat contains a large bath-room with seven tubs, with every facility in the toilet rooms for cleanliness and comfort. Any respectable physician can obtain tickets for poor children with their attendants, and every trip the boat is filled with those who get in the delightful sail and the abundance of nourishing food given them on the boat and at the sanitarium that life and strength which snatches many of them from the grave. Dr. Green, the most careful and skillful medical officer, gives accounts more marvelous than the tales of fiction of the sick, wasted and apparently dying little children, brought to the boat unconscious in their mothers' arms, under the influence of the ocean air opening the eyes glazing in death, and as the color comes back to lip and cheek eagerly drink the milk held to their mouths. On arriving at the sanitarium those too sick to return to the city are taken into wards, whose windows are open to the sea, and cared for by skilled and trained nurses. The President of St. John's Guild, Mr. Wm. H. Wiley, and the treasurer, Mr. Fauer, deserve the thanks of the entire community for their indefatigable efforts in directing and sustaining the most noble and efficient voluntary charity in New York. The cost of each trip is about three hundred dollars, which amount is not unfrequently contributed as a thank offering by some of our warm-hearted citizens, who feel that in no other way can they so efficiently contribute of their wealth as in this giving life and pleasure to the suffering and destitute.

DR. MACKENZIE'S full report of the medical treatment of the late Emperor of Germany will undoubtedly be published in a short time. When that report is given to the profession we shall be able to form a pretty fair idea of how much of the intense bitterness of the German

profession against Mackenzie is based upon truth and how much upon personal spite and professional jealousy.

BIBLIOGRAPHICAL.

NATURE'S HYGIENE. A systematic manual of Natural Hygiene, containing a detailed account of the Chemistry and Hygiene of Eucalyptus, Pine and Camphor Forests and industries connected therewith. By C. T. Kingzett, F. I. C., F. C. S., Past Vice-President Society of Public Analysts; Past Member of Council, Institute of Chemistry of Great Britain and Ireland; Hon. member Soc. Fran. d'Hygiène; author of "The History, Products and Processes of the Alkali Trade," and "Animal Chemistry: or, The Relations of Chemistry to Physiology and Pathology." Third edition, London; Baillière, Tindall & Cox, pp. 240, 8vo. The "Sanitas Company," 636-642 West Fifty-fifth street, New York.

This work cannot fail to interest students of antisepsis, fermentation and digestive processes, and should be in the hands of every one who has to do with the public health. The account of the camphor forests is new and interesting and the study of micro-organisms is most intelligently presented.

A MANUAL OF THE MINOR GYNÆCOLOGICAL OPERATIONS. By J. Halliday Croom, M. D., F. R. C. P. E., F. R. C. S. E., Lecturer on Midwifery and the Diseases of Women at the School of Medicine; Physician to the Royal Maternity Hospital; Physician for Diseases of Women, Western Dispensary; Vice-President of the Obstetrical Society, Edinburgh. First American from the Second Edinburgh Edition. Revised and enlarged by Lewis S. McMurtry, A. M., M. D., Formerly Professor of Anatomy in the Kentucky School of Medicine, etc. With numerous Illustrations. Philadelphia Records. McMullin & Co. 1888; pp. 228, 12 mo.

This little work is intended to furnish a brief, simple and practical account of the more common gynæcological operations, and its object is well carried out. Students and even general practitioners will find it a most convenient hand-book.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A yearly report of the progress of the general sanitary sciences throughout the world. Edited by Charles E Sargous, M. D., and seventy associate editors assisted by over two hundred corresponding editors, colaborators and correspondents; illustrated with chromo lithographs, engravings and maps. Philadelphia and London; F. A. Davis, publisher, 1888.

The object of the "Annual" is to collate the progressive features of the whole world of medical literature as found in the hundreds of medical journals and works upon medicine, published in every country, together with the clinical data from countries in which no literature exists, presented once a year in a continued form by writers of known literary ability. The cream of the new medical literature of the world, being the experience and ripest thoughts of thousands of practical minds in every department of our profession, during the past year is condensed in these five volumes and put in readable form by literary experts. These volumes are a mine of wealth which we have occasion to consult every day.

A TREATISE ON MARKS' PATENT ARTIFICIAL LIMBS WITH RUBBER HANDS AND FEET. A. A. Marks, 701 Broadway, New York.

This book must be of interest, especially to the surgeon, but the history of the progress in this specialty, with its "Argument" and statistics, cannot fail to interest any reader. It seems wonderful, as we glance through its pages and observe the mechanism which the veteran Mr. Marks has originated. A copy will be sent free to any surgeon who will mention this journal, and no surgical library will be complete without it.

LESIONS OF THE VAGINA AND PELVIC FLOOR, WITH SPECIAL REFERENCE TO UTERINE AND VAGINAL PROLAPSE. By B. E. Hadra, M. D., Austin, Texas. With Eighty-three Illustrations. Philadelphia: Records. McMullin & Co. 1888; pp. 329, 12 mo.

The text of this little work seems to be carefully written in a comprehensive and practical form, and embraces the literature of the subject to date.

ATLAS OF VENEREAL AND SKIN DISEASES, WITH ORIGINAL TEXT. By Prince A. Morrow, A. M., M. D., Clinical Professor of Venereal Diseases. Surgeon to Charity Hospital, etc.

The eighth fasciculus is before us and contains plates covering seborrhœa, comedo, milium, sudamina, typhus fever, typhoid, variola, varicella, rubeola, rubella, scarlatina, erysipelas.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE FOR THE USE OF PHYSICIANS AND STUDENTS. By James Tyson, M. D. Sixth edition, revised and corrected. Philadelphia; P. Blaxiston, Son & Co., 1888.

Tyson on "Urinary Analysis" is a text book in nearly all medical colleges. The sixth edition has been carefully revised and while the enormous amount of new material has been thoroughly sifted the new matter has only filled the place of that eliminated, so that the new edition contains the same number of pages as the old.

The fourth and fifth volumns of "Alden's Manifold Cyclopedia" extends from Baptism to Brave, and more than sustains its previous reputation for fullness of vocabulary and for the excellence of its literary and scientific work. Every family needs a cyclopedia, and when one in thirty volumes of the fullness and accuracy of information upon every subject in the range of literature and science can be obtained for twelve dollars it is easily brought within the reach of the million. John B. Alden, publisher, 393 Pearl street, New York.

Reed and Carnrick will mail free, on mention of this journal, to any physician desiring, a copy of their "Diet Tables," which will be found convenient and of great service.

OBITUARY.

Dr. J. MILNER FOTHERGILL who has been prominently before the public for many years as a medical writer of marked intelligence and literary skill recently died suddenly at his home in England.

Dr. A. Y. P. GARNETT, at one time Assistant Surgeon U. S. N. and later Surgeon-General of the Confederate

Army, died on the 11th inst., in the 67th year of his age. Dr. Garnett married a daughter of Henry A. Wise, of Virginia; was the physician and intimate friend of Jefferson Davis, and also of Judge Jeremiah Black. His property was confiscated during the war but afterward restored to him through powerful personal influence.

DR. T. MATTACK CHEESMAN, son of the late distinguished surgeon, Dr. John C. Cheesman, died at his residence July 7th, aged 64 years. Dr. Cheesman was for many years surgeon of the famous Seventh Regiment.

CORRESPONDENCE.

AMERICAN INSTITUTE MEETING.

To the Editors of THE NEW YORK MEDICAL TIMES:

The session of the American Institute of Homœopathy, recently held at Niagara Falls, was an enjoyable and profitable meeting. The work was kept well in hand by the President, Prof. Cowperthwaite, whose promptness in calling the institute to order at the very minute, impartial rulings and courteous manner, won the admiration of all. In his address the President called for a firm stand on the part of the institute in behalf of a more advanced standard of education, by requiring (1), a good preliminary education, including some knowledge of the classics; (2), a four years' course of study; (3), attendance upon three full courses of lectures, of at least six months each.

The Committee on Medical Education in its report insisted on a preliminary education, which should include mathematics, ancient and modern history, geography, natural philosophy, physiology and elementary chemistry, with Latin and Greek. If the student could not present a certificate of these qualifications, a rigorous examination to be insisted on. In the colleges four years of study and three full courses of lectures of five months each. That every college should possess a working laboratory, where chemistry and pharmacy can be practically taught. Also that the therapeutics of other schools should be carefully explained, and the student, thus prepared, to give a "reason for the faith that is within him."

After considerable debate, the following resolution was adopted, as being the most practical advance which could be carried out at the present time: That, after the college session of 1890-91, all homœopathic colleges of this country shall require of their graduates three years of medical study, including three full courses of didactic and clinical instruction, of at least six months each; that this institute shall, after 1891, require of all applicants for membership, graduating after that time, full compliance with the above requirements for graduation.

Dr. Wesselhœft, of the Committee on Pharmacy, presented a résume of provings made with sugar of milk and mercurius sol. hahnem., a continuation of the work of last year. The symptoms obtained from sugar of milk were as voluminous as those reported from the administration of the 30th cent. trituration. It was difficult to say that any effect followed the 30th more than when no medicine was taken. A portion of the results were due to the medicine, but it was difficult to say what portion of it. He thought incongruous symptoms obtained from drugs, and congruous symptoms obtained from an inert substance (sugar of milk), should be ruthlessly thrown out. He was convinced that no healthy person experienced effects from refined or highly attenuated drugs. Dr. Sherman reported that experiments had shown that the dark substance which appeared on the side of the mortar when triturating sugar of milk was nothing more than carbon produced by the decomposition of the sugar.

The Committee on Pharmacopœia recommended the consideration of the following suggestions:

1. The use of the word dilution instead of tincture, for attenuated preparations.
2. Use of distilled water as a standard of comparison between weights and measures. Instead of minims we would read grains.
3. Use of glass-stoppered bottles for distilled water.
4. Use of alcohol of sp. gr. of 820.
5. Use of the decimal scale entirely.
6. Omission of the reference to the therapeutic activity of certain drugs.
7. Introduction of maceration as a tincture-making process, alternating with percolation.
8. Dilutions to correspond in medicinal strength (drug power) with trituration of the same number, instead of 11-100, as at present.
9. Limitation of the sign ⊃ to denote the strongest liquid pharmacopœial preparation.
10. Use of sign ° to denote original substance.
11. Use of single vernacular pharmacopœial name for each medicine.
12. Alphabetical arrangement of all caption names for each medicine.
13. Simplification of the process of trituration and a longer time to a given quantity of the furnished product.

It was Resolved, That a committee of twelve, six of whom shall be pharmacists, be appointed to prepare a Pharmacopœia which shall bear the authoritative sanction of this body. That the committee should confer with other similar committees in other societies, with the intent of making the work, if possible, of an international character.

The committee on Drug Provings presented 31 provings of different drugs, 13 of which were of chininum arsen. This briefly shows the original and scientific work presented at the session, and does credit to the members of the committees presenting it, and will do honor to the Institute.

All the bureaus presented full reports. A larger number of the papers than usual showed more extended research and personal observation than ordinary sessions are favored with. These reports were very fully discussed in sectional meetings. This latter plan is working to better advantage with every session of the Institute. It may add considerable to the expense, but as members realize its advantages, in the increased amount of time given them for discussion, they will the more strenuously insist upon this time being occupied for its legitimate purpose, and will not tolerate long winded essays, and the expense will become a secondary object in comparison with the vast gain in gathering in the practical every day experience of the members. Sixty-eight new members were enrolled.

The following officers were unanimously elected:

President, Selden H. Talcott; Vice-President, T. Y. Kinne; General Secretary, P. Dudley; Provincial Secretary, T. M. Strong; Treasurer, E. M. Kellogg.

The committee on medical legislation presented the following resolutions:

Whereas, Single State boards of medical examiners have been recently established in several States, the membership of which has been made up wholly or largely of the representatives of one school of medicine, thereby fostering

and maintaining sectarianism in medicine in a most obnoxious form ; and

Whereas, The practical effect of the creation of these sectarian boards is found to be prejudicial to the interests of other schools of medicine, and constitutes an unnecessary and unwarrantable interference with the free exercise of the widest liberty of thought and action consistent with the public welfare ; therefore

Resolved, That whenever legislation shall be attempted in any State, looking to the creation of a single State board of medical examiners ; homœopathists are hereby urged to oppose such bills to the fullest extent of their influence, unless amended so as to provide for the appointment of homœopathic examining boards, having equal legal rights and privileges with those of other schools of medicine.

Resolved, That while we approve the appointment of State boards of medical examiners as the most suitable method for securing higher and more nearly uniform standards of medical acquirements, we reject the proposition that these desirable ends can be obtained only through the appointment in each State of a single examining board.

Resolved, That while we approve the principle of State examinations, homœopathic interests can be conserved only by the establishment in each State of a separate homœopathic examining board ; or that which is its equivalent, viz. : the appointment of a full corps of seven or nine homœopathic examiners, whose decision alone shall be final as regards the standing and licensure of all homœopathic and other students making application thereto.

Resolved, That in case it shall be found to be difficult or expedient to create and maintain a State homœopathic examining board, homœopathists are hereby urged to rely for the protection of their interests mainly on laws for the regulation of medical practice and the registration of all practitioners.

Resolved, That in States in which laws for the regulation of medical practice have failed to protect homœopathic interests, and persistent efforts are being made for creating a single Old School examining board, homœopathists in such States are urged to secure a board of their own ; and failing in that, to insist upon the passage of a law providing for the teaching of homœopathic principles and practice in each of the Old School medical colleges in said States, in order that all medical students educated therein, shall receive at least a theoretical knowledge thereof.

Resolved, That a copy of these resolutions, with such other suggestions as the committee on medical legislation may deem proper, including suitable forms of proposed medical bills, be presented by circular or otherwise to the homœopathic profession at an early day.

On motion of J. P. Dake, M. D., the following resolution was adopted :

That in the making up of lists of existing journals and institutions in any way illustrative of homœopathy by the Bureau of Registration and Statistics and the Committee on Medical Literature, all such shall be embraced as recognize the homœopathic principle. That no journal or institution thus listed shall be stricken off without a distinct statement through the general secretary to the Senate of Seniors of the charges brought against the same, and then not without due notice and opportunity for a defence on the part of the journal or institution under censure, final action on the case being deferred until the succeeding annual meeting, but the name of the journal may be dropped from our list without ceremony after having failed to make report to the Institute for the term of three consecutive years.

The Institute adjourned to meet at Lake Minnetonka, Minn.

Editorial Note.—The following letter of Dr. Dake was a friendly communication not intended for publication, but as it contains information not given in other reports, he has kindly given us permission to print it as an appendix to the report of Dr. Strong :

Dear Dr. Guernsey : By reference to the report of the Niagara Falls meeting of the American Institute, you will observe that, upon my motion, two standing resolutions were adopted defining the duties of the Bureau of Registration and Statistics, and the Committee on Medical Literature, in the listing of journals and institutions for our annual reports. Hereafter no snap judgment can be taken against a journal or an institution, as in the case of THE MEDICAL TIMES last year.

I made the journey to Niagara largely for the purpose of having that wrong righted. I gave my views to the Senate of Seniors before bringing them before the Institute, and had the pleasure of a full endorsement.

After my resolutions were adopted, Dr. O. S. Runnels moved to rescind the vote of last year, by which the TIMES was dropped, and the affirmative was without opposition.

Among all the journals that come to my desk, I prize none more highly than the TIMES. Fraternally yours,

J. P. Dake.

Dr. Runnels says : "The resolution was adopted early Thursday morning. Neither Drs. Dudley nor Strong was in the room, and I did not reduce my motion to writing, but I immediately asked Dr Kraft, the stenographer, if he 'had' the resolution, and he said, 'yes.'

"As nearly as I can recollect, the resolution was as follows :

"*Resolved*, That the motion adopted by the Institute last year relative to the erasure of the NEW YORK MEDICAL TIMES from the list of Homœopathic Journals be, and is hereby, rescinded."

REPORT UPON MEDICAL EDUCATION.

In making this report, we have a duty to perform that we assume with the greatest diffidence. The able report made by your Committee at our last meeting, would seem to be sufficient if their recommendations were carried out by our medical colleges. Your last committee divided medical education into three periods, viz : preparatory, collegiate and post-graduate, and we will formulate our report upon this classification.

If hereafter, the principle is strictly adhered to, to accept no matriculant who has not a good education, we shall not in the future be necessitated to be "put to the blush," as has been the case in the past.

The public at the present day are much more exacting in their demands for medical men whose education is of a high order, and who possess general knowledge as well as technical skill, than they were in times gone by ; and the young doctor who settles in a community of acknowledged intelligence, should be cognizant of these facts, and know that he must have some special merit, coming through and by virtue of a thorough education, to entitle him to a complete recognition from the people, and a favorable reception from professional competitors.

It is a trite saying, that "it is an angelic pleasure to grow in knowledge," and the laity of the present time already

appreciate the fact, that the more perfect the physician is in science, the more exact, and adroit, will he be in the practice of his art; and, if he is lacking in the essentials of a finished medical education, he will never be able to reach the highest aims and noblest ends of his profession.

What therefore shall be required of a student who proposes himself as a matriculant in a medical college, and is a candidate for the degree of doctor of medicine? The applicant, if he is not a graduate of some college or other institution of learning, should at least have a good English education, that will include mathematics, outlines of history, ancient and modern, a knowledge of Geography, Natural Philosophy, Physiology and elementary Chemistry; and, in addition to the above, he should be conversant with Latin and Greek or at least one foreign language. When a student comes without any academical testimonials, or first-grade teacher's certificate, an examination should be made upon the above named subjects, excepting in Latin and Greek. The American Institute is recommended to insist that medical colleges shall enforce the above preliminaries before a student can be enrolled as a matriculant for the College degree.

We recommend that every institution whose diplomas we recognize hereafter, shall require the candidate to study medicine four years, and take three annual full courses of lectures before making application for the degree of doctorate; and the term of lectures in the college course, shall be uniformly, six months, thus making a complete semester, in accordance with the custom so long prevailing in the old country.

We recommend that every medical college shall have a working laboratory, where chemistry and pharmacy can be thoroughly and practically taught, and shall as occasion may require, give additional lectures upon collateral subjects connected with the science of medicine, so that the student may be kept thoroughly informed concerning all the latest advances in our profession.

We also recommend that in addition to the therapeutics of medicine, whereby the student is grounded in the "law of cure" as enunciated by Hahnemann, that the therapeutics of other schools shall be explained, and the student will be thus prepared to give "a reason for the faith within him." The late Dr. Hempel, in his inaugural tests for the degree of doctor of medicine (years ago) quoted the well known aphorism of Horace: "nullius addictus jurare in verba magistri," to illustrate his entire freedom of thought, that it was not required for a physician to be limited to the exact teachings of his masters. Let our colleges keep up with all scientific advances, and our motto be "Scèentia et Neritas sine timore," and let us teach our students, "the best that has been thought and taught, by medical philosophers and authorities of ancient and modern times," and our graduates will then form a veritable "corps d'elite."

When we send out such physicians, they will be so disciplined as to naturally develop self-culture, which above all other characteristics is the one that will in practice not only give precedence and success, but, finally, eminence in the profession. Such physicians will naturally avail themselves of post-graduate instruction, in accordance with the aphorism, "qui non proficit deficit." To become an accomplished physician, medical teachers should impress upon the student that he must have a proper ideal of what is requisite to succeed and become eminent in the profession—"no perspective, no ambition"—and we take this occasion to quote Hahnemann's words, as to the necessity of those who intend to practice medicine, to thoroughly master it. Hahnemann says: "When we have to do with an art whose end is the saving of human life, any neglect to make ourselves masters of it becomes a crime." Hufland, contemporary with Hahnemann, says: "the healing art is therefore, something sublime and really divine, and its duties require resignation and an elevation of mind far above worldly desires." Even old Hippocrates gave six rules for the education of physicians, and they are not inappropriate at the present date. We will give a resumé of them in the following words:

I. "Natural talents, and a genius adapted to the science and art of medicine."

II. "A good preliminary education, so that he can study the whole circle of science, and be a master of his profession."

III. "He must have a competent instructor."

IV. "He must begin the study of medicine at an early age."

V. "He must be industrious. and combine the love of labor with an emulation for all that is amiable and praiseworthy."

VI. "He must have ample and sufficient time, to continue long in study" (equivalent at this day to post-graduate study).

Verily, we cannot improve much upon the requirements of Hahnemann and Hippocrates.

The State Board of Health of Illinois (a prominent member of which is one of our honored seniors) has done very much to elevate the profession in that state, and its influence in elevating the profession is already felt in other states. In a report made by its Secretary, Dr. Rauch, upon medical education in 1886, he thus speaks of those graduates who had attended three courses of lectures in medical colleges before receiving their degree. "I have followed up with special interest and care the cases of 789 out of 1000 physicians who studied medicine four years, and attended three terms before graduating. These are with few exceptions the prominent members of the profession in the different communities where they reside. They are well equipped by general education, by an ample period of professional study, by didactic and clinical instruction, and by hospital practice." These expressions, coming from such authority, ought to remind medical professors of their duty, and likewise incite medical students not to make too much haste to attain their degree, but to take more time, and make themselves proficient and accomplished before applying for it. In this report we have not made any recommendation regarding the proposal to take the power of granting degrees from the medical institutions, and give it to a State Board of Examiners, who are properly commissioned for that special purpose. For the present, such a proposal is not practicable, but in time it will come, and we shall hail its advent with pleasure. In the meantime, while we are waiting for the completion of such a plan (which in our own opinion, will elevate the standard of the profession) let us see to it that every graduate of our colleges in the future, shall be so disciplined, and fitted by a higher education, that they will pass with honor and praise, any State Board examination that may be hereafter instituted.

Respectfully submitted,

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Chairman Com. on Med. Education Am. Inst. of Hom.

MEDICAL RISKS.

There are certain risks which physicians are obliged to take with their patients which are very well known and

perfectly justifiable. The use of quinine in typhus fever, of bromide in nervous convulsions, of chloral in certain cases of insomnia, must sometimes be carried to the verge of medical possibility, to the limit of what the human system is able to endure in aissimilating poisons. More frequently is this the case in surgical operations. A malignant tumor which is choking the larynx must be removed at the risk of the patient's dying under the knife. The removal of an ovarian tumor is often like tossing up a penny for the patient's life. A large proportion of operations on the thigh joint are fatal, and yet they have to be done. No rational person has ever complained of the medical profession for taking risks of this class.

When, however, a patient is afflicted with some malady which may be troublesome but not necessarily fatal, such as asthma, rheumatism, or a nervous disorder, I hold that no doctor has a right to pursue a course of treatment which if not successful will produce injurious results. Even if the person afflicted is aware of the risk and willing to take it, his medical counsellor ought to consider that the perpetual annoyance of a chronic trouble is liable to produce that exasperated and reckless state of mind which so often germinates in imprudent action. He should consider how the patient will feel about the matter after the experiment is over. It is like advising one's friends in a railway to Oregon; very fine if they double their money, but if they lose most of it there is likely to be war in the camp.

To explain my meaning by a few illustrations from life. The Philadelphia rest cure is always a good deal of a speculation. It is very expensive and a large proportion of the patients who go through it receive little benefit from it; while I have known of several who were seriously injured. One of these, a young lady who had been quite a comfortable sort of invalid for several years, had to be rescued from it by outside interference, and died in about six months. Another lady of distinguished descent had her digestion so badly affected that now after two years she is not so well as she was previous to the experiment. A rather more dangerous risk is for doctors to advise weak patients to take a long sea voyage. A noted Boston banker told me that many years ago, I think in the sixties, he had been recommended to go to England in a sailing vessel and never since ceased to feel the bad effects of it. A Portland lady who went to San Francisco by way of Cape Horn died either just before or just after she reached there, I forget which. Imagine what that woman must have suffered; for there is no worse pain than being on the ocean if it continually disagrees with one. A New York doctor who returned in a barque with me from the Azores said that he should never recommend any person who was not strong to go to sea since he had seen the effect of it on his own wife. Another and unpardonable risk is the systematic use of chloral and morphia to produce sleep when a moderate amount of sleep can be obtained without them. I have known of serious injury being done in this way.

A gentleman with whom I am well acquainted was afflicted with a disorder of the circulation which was bad enough to prevent his doing hard mental work but still permitted him to enjoy life in a great many ways. With the hope of improving his condition he went a few years since to a fashionable doctor in one of our largest cities. Now a fashionable doctor to keep himself in vogue must make brilliant cases, and in order to do that he must take a good many risks. This doctor, after trying to bully him and coax him into health, and finding that horse back riding gave him cerebral congestion, massage kept him awake at night, and fish oil gave him dyspeptic headaches, advised him to go to Colorado and spend a year on a ranch. "I should be glad to do that," replied my friend, "if you will make me strong enough to bear the journey." "Why," said the doctor with some impatience, "it is only a seventy-two hour's ride in the cars." "True," said my friend, "but if I ride seven hours in the cars I feel the ill effects of it for five or six days, and if that were to be repeated many days in succession I should fear it's doing me serious harm." The doctor smiled patronisingly and said: "It cannot possibly do you permanent harm; you must lie down a good part of the journey, and take plenty of rest after you get there." Being a man of unusual energy he finally persuaded my friend to go, but with a most unfortunate result. He carried out the directions of his medical adviser to the letter, and at the end of fifteen months returned to his home in New England a complete wreck for life. After that this same omniscient doctor advised him to take a voyage to China! He ought to have had his diploma taken away for such reckless persistence in error.

It is to be feared that much of this arises from a certain contempt in which invalids are held by unreflective physicians as well as other unreflective people. A Wisconsin man brought his son to an Eastern doctor and said: "I want you either to cure this boy or kill him. We don't want him to return to Wisconsin unless he is well." The conscientious doctor, however, treated him prudently and afterwards sent him home apparently well and strong. To cure or kill is a Spartan principle, but is it a Christian one? I do not believe that a physician can be found anywhere who holds seriously to such a principle, but there are some in whose minds may be found broad traces of it. Many of the most valuable people are what are called invalids. They happen to be of a physical or mental structure too delicate to be anything else in this rough world. No doubt there are many invalids who are a burden to their relatives and themselves, but many sound healthy persons are so likewise. A useful man or woman, as a rule, never ceases to be useful as long as there is anything left of them to be useful with. Their utility is not to be measured wholly by the amount of money which they earn and spend. Twelve years ago a fragile New England girl, of scarcely fourteen years, was permitted to go to the Philadelphia Centennial, that monstrous juggernaut which crushed the life out of many delicate people. Exactly what happened to her there I have never learned, but she returned home an invalid and has been one ever since. Endless torment and privation have been the fortune of her young life instead of the innocent joys of maidenhood; but her unconquerable spirit has risen above everything she has been obliged to suffer, and with that victory over herself she also acquired a power over others such as few can attain to. She is at once the idol and cement of her own family, and the chief magnet among a host of friends. They quarrel and fight for a sight of her, and come long distances in order to be with her only a few minutes. The quick delicacy of her appreciation and the keenness of her wit make easy the tasks of those who care for her. With a word or a look she can make her friends happy or miserable. "It is a trite remark" to say that one such invalid is worth a score of commonplace women who only know how to dress, and keep house, and bring forth children like themselves.

HARVARD.

TRANSLATIONS, GLEANINGS, ETC.

RETROSPECTIVE THERAPEUTICS.

Mullein Oil in Enuresis.—It is not probable that it will prove a specific in every case, but it should be added to the list as an agent liable to do good work in time of need. The *U. S. Medical Investigator* says that Dr. Cushing, of Lynn, Mass., made a proving of it a number of years ago, and found dribbling of the urine a prominent symptom. Since that time, he writes, "I have treated many cases of enuresis, mostly nocturnal, some of which had resisted years of treatment, both by Old School and New, and I do not know of one thus treated that has not been cured."

The dose will vary somewhat with the caprice of the prescriber. We would suggest a dilution of the oil in alcohol—one part of the oil to fifty or a hundred parts alcohol. Of this give five or ten drops at a dose, repeating four or five times daily.

Nitro-Glycerine.—The value already conceded to this agent in various heart affections and other diseases dependent upon "an irregular distribution of blood" (see MED. TIMES, January, 1888) has been forcibly confirmed by Dr. E. Van Goitsnoven, in the *Southern Medical Record* for September, 1887. After detailing several cases in which patients, to all appearance *in articulo mortis*, were instantly restored to life and energy by one or two drops of a one per cent. solution of "dynamite"—which was succeeded by recovery wherever recovery was possible—he concludes as follows: 1. That nitro-glycerine is the most potent arm which can be placed in the hands of the physician for the purpose of combating functional diseases of the heart, from disordered innervation, characterized by mitral failure, decreased or diminished circulatory action, sinking sensation, sense of impending danger, cerebral anemia, collapse, syncope.

2. That in many cases of grave import, digitalis, though very efficient, is too slow in its action, and should make way for this more prompt, reliable and efficacious remedy. Nitro-glycerine is a powerful stimulant—digitalis is a tonic.

3. That inasmuch as it has been demonstrated by indisputable authorities, that nitro-glycerine will replace alcohol wherever and whenever the latter might be used as a cardiac and cerebral stimulant; it being also proved by the same authorities that one drop of the one per cent. solution is more than the equal of one ounce of brandy in such a case, it would be the part of wisdom and safe expediency to use this new therapeutic agent as a most valuable substitute. Such a course would prove a great boon in communities where *prohibition prohibits* a poor sick man from getting in a drug store what a rich sick man finds readily at home.

Santonin in Night-Terrors.—Dr. Thomas H. Steward writes the *Therap. Gazette:* "My first use of santonin was in my own son, six years old. He had night-terrors. I exhausted the catalogue of anthelmintics and tonics, mineral and vegetable. He got no better, but worse, until his frights at the sight of familiar friends threatened convulsions, and then temporary blindness was increasing in duration. I gave him santonin, per os and per rectum, morning and night, three grains each way. No worms appeared, and yet his night-terrors stopped to return no more. A young man, twenty-one years old, clerk in a drug store, had night-terrors, and consulted me on the subject. I ordered santonin and calomel each night for two nights. He laughed and said he was not wormy, and for a time refused to take the prescription; but at last he took it, and his terrors ceased, though no worms appeared.

Tobacco.—There is no drug included in the materia medica (says the *Lancet*) of which it is more necessary to be careful in regard to its introduction into the human system—a carefulness which shall result in the absorption by the tissues of just the amount required to accomplish a therapeutical result and no more—than tobacco. There is one method of exhibition spoken of by medical writers, in which this exactness can rarely be attained, in which the drug once given passes from the control of the person administering it, and is liable to cause the gravest condition, even death; I mean the injection of the infusion into the rectum.

So little is tobacco used by medical practitioners of the present generation that few of them, perhaps, have witnessed the utter relaxation which it produces in the human system—an unharnessing, so to speak, of the muscular apparatus, which follows the administration of no other drug. While yet young in the practice of my profession, I encountered two desperate cases of incarcerated hernia, which called for the most powerful relaxant known to medicine. I chose tobacco, and was happy in eschewing the infusion and choosing the leaf—the ordinary cut tobacco—as a suppository. The results I cannot but esteem brilliant even in the light of the appliances of the present day—relief being obtained in a very short space of time. On one occasion, in which a hernia in one of the cases referred to had resisted for many hours the best directed efforts of some capable physicians, I was pleased to find the protrusion released within an hour by the aid of the suppository. So complete was the paralysis of the sphincter ani, that it had released its grip of the tobacco, which was found lying outside—the anus being open sufficiently to admit a finger. The application had proved to be self-regulating—coming away when no longer needed. The amount of the drug used was about sufficient to fill the bowl of a common smoking-pipe—estimated at 12 grains. The particles were held together by threads wrapped about them—the ends of which being allowed to protrude, afforded a suitable means of withdrawal.

All the cases reported of poisoning by this drug have resulted, so far as I have learned, from faulty methods of exhibition, or from the use of an inordinate dose. In the cases stated by Pereira, as coming under the notice of Sir A. Cooper, Sir Charles Bell, and Dr. Copeland, one drachm in cluster proved fatal in each case. Pereira also relates that a half drachm in infusion has caused death.

Boric Acid for Sty.—A simple and effective remedy for sty has been found to be a solution of fifteen grains of boric acid to an ounce of water. By applying this solution three times a day to the inflamed part of the eyelid, by means of a camel's hair brush, this painful and annoying affection will be conquered very rapidly.

Benzoate of Lithium.—Benzoate of lithium (according to the *Giornale Internazionale Delle Scienze Mediche*, No. 8, 1887,) is theoretically of special utility in the treatment of gout, since it contains benzoic acid, which renders uric acid soluble, converting it into hippuric acid and lithium, which promotes its expulsion from the system. It is important that the base should be lithium and not potassium or sodium, and it is also better that the acid used in the preparation of the compound should be that obtained from benzoin. The dose is from one to ten grammes (15 to 150 grains) a day, given in divided doses, dissolved in water. In the intervals of the attacks a daily dose of 15 grains is

sufficient; but on the first approach of an acute attack it should be rapidly increased, in order to hasten the transformation and expulsion of the uric acid and the urates.

Electricity in Chronic Constipation.—Hitherto the faradaic current has been for the most part used in constipation, but Leubuscher finds the galvanic current more efficacious. He passes an electrode connected with the cathode into the rectum, and applies the anode to the abdominal balls in the course of the large intestine. He does not mention the number of cells he employed, but says he used a current which, without causing pain, could be distinctly felt. Each application lasted 10 to 15 minutes. Out of fifteen cases four were cured, in nine constipation was temporarily relieved, but returned shortly after the electrical treatment ceased, and in two no good results followed. The first three or four applications are generally without apparent effect, and for some time the action of the bowels does not occur from five to twenty hours after the galvanic current has been employed, but gradually the interval is reduced to two or three hours, and the feces become softer.

Arsenic as a Cancer Cure.—Frank H. Moerk, Ph. G., in a paper read before the pharmaceutical meeting of the College of Pharmacy (*Am. Journ. Pharmacy*, Nov., 1887), reported the following result of his analysis of a black powder submitted to him by Prof. Maisch:

Moisture	0.99
Charcoal	36.82
Arsenious oxide	62.19
	100.00

Dr. Purcell, of Bristol, stated in a letter that this powder had undoubtedly cured many cases of epithelioma and other cancerous growths, and gave the following as the mode of applications: cover the surface lightly with the powder; apply over it, to protect the powder and keep it in place, a piece of black silk somewhat larger than the ulcer and made adhesive by egg albumen. Considerable pain is, of course, produced, but the first application, and all subsequent ones, are allowed to remain until the pain subsides, which will be in five or six days. A new one is then applied in the same way and repeated from time to time until an eschar is detached without force. A poultice of elm bark is applied and the ulcer allowed to heal.

While the use of arsenious acid for external application has long been made, yet every writer emphasizes the danger in using it where the cuticle is removed, and Dr. Purcell thinks most physicians, like himself, have feared to so use it for this reason.

Dr. Purcell also stated that this powder had a great reputation in the upper parts of New Jersey, and that money had been freely offered to obtain the secret of its composition, but all offers had been declined.

It is probable that the previous application of cocaine with morphia would largely prevent subsequent pain from the application of the powder.

Veratrum Viride.—Dr. A. Ady, in the *Med. and Surg. Reporter*, Nov. 19, 1887, thus narrates his experience with this drug: "I have been using it for thirty-four years, and it has disappointed me fewer times than any other medicine. In proper doses, I do not believe that it has any tendency to weaken the heart. On the contrary, by slowing its contractions, it gives that organ time to rest and recuperate. As a heart tonic I consider it equal or superior to digitalis; as a controller of the heart and arteries, superior to all other remedies in use.

"In all inflammatory disorders in which the action of the heart is too strong and frequent, it is superior to bloodletting. In acute pleurisy and pneumonia, when a patient is brought throughly under its influence, he is about cured. The cumulative effects of veratrum viride are not dangerous, as they are relieved by vomiting, after which the patient will almost invariably ask for something to eat.

"In typhoid fever veratrum viride is one of the best of remedies. Throughly unloading the stomach and portal circulation, preventing the tongue from becoming dry and parched. I feel sure, also, that in many cases it has shortened the course of the disease. Patients eat well while taking veratrum viride. The doses in these cases must be small, one drop of Norwood's tincture every four hours being often sufficient.

"In puerperal convulsions it is a most efficient remedy but must be given in very large doses, the uremic condition producing tolerance of its effects. A patient in puerperal convulsions can safely take from thirty to sixty drops of the fluid extract. I have not been obliged to repeat the dose in such cases, nor has vomiting occurred.

"In membranous croup it is *the* remedy; but must be given for effect, not in ordinary doses. I have given a child two-and-a-half years old, twenty drops of the fluid extract inside of six hours, with the best results. It is worse than useless in diphtheria, scarlatina and pyemia.

"I have used it in smallpox, bringing the patient under its influence in the initial fever, and not allowing the pulse to rise above sixty beats per minute during the course of the disease. In this case no delirium occurred, nor any secondary fever, and when the crusts dropped off no pitting of the skin was left. Dr. Maxwell, of Davenport, now dead, confirmed my experience, after ample opportunity to test it in the army pest-houses during the war. He also claimed that, if the drug was administered during the course of vaccination, no scar would be left

"The only unpleasant symptoms which I have witnessed from the use of veratrum viride, have been nausea and vomiting, and according to Prof. H. C. Wood, they can be entirely avoided by separating the alkaloid containing the sedative principle from that of the emetic, as was done by Mr. Chas. Bullock, of Philadelphia, with the article experimented on by Prof. Wood."

Sierra Salvia.—This perennial plant, the Rocky Mountain sage, is found in abundance on the plains west of the Missouri River, on any of the central lines of railway travel, and at almost any elevation from four thousand to eight thousand feet above sea level. The portion used is the superstructure, which ripens during the latter part of August, but must be gathered for medicinal use in the early stage of bloom, and just as soon as the pale-yellow shade tinges the pollen. The maladies incident to the region where the plant is found are such as would be natural to expect from the sudden changes from heat to cold, which result, in the case of one exposed and overtaken while riding, in an abrupt and almost complete suppression of the offices of the skin. Whilst quinine was formerly used and seems to be indicated, the dry skin and high temperature with cerebral congestion are best allayed by an infusion of the mountain sage, whose virtues are appreciated by other animals than man.

From personal experiment and observation in many climates, from the range to coast, for several years, Dr. A. Comstock (*Therap. Gaz.*, Oct. 15, 1887,) has found it the most effective single ally in cases of periodic fever, rheumatic or neuralgic affections, the exanthemata, diphtheria

and kidney troubles of the type where a diaphoretic or diuretic is required, of any named in the entire list of materia medica products. If taken hot, it at once affects the capillaries, and a free diaphoresis follows. When used cold, it acts upon the kidney in from three to five hours, and often in one-half this time. Not more than three-fourths to one-half a drachm of the bloom to a pint of boiling water, and steeped as cautiously as the most delicate cup of tea, or till the fibres settle to the bottom of the china bowl (for no metal should be used), when it is ready for use, and may be taken, not as a medicine, but as freely as the patient may be inclined, always after going to bed, to get the best action on the skin and to quiet nervous irritation. For a tonic and taken cold, it may be administered in less quantity, say a wineglassful. Messrs. Parke, Davis & Co. have lately put up a fluid extract which concentrates the elements in a very neat form. Of this about one-half a fluidrachm will be tolerated and act best when diluted with a full pint of hot water and allowed to cool, being meanwhile covered so that none shall volatalize by way of steam. For the cases indicated it is not improbable that, when patiently tested, it will become as much a staple as the cinchona preparations of South America, the cloves of South Africa or the rheum of Asiatic India and China.

Colchicum in Rheumatism.—Dr. E. F. S Arnold writes in the *College and Clinical Record* concerning a remedy for rheumatism employed with wonderful success by the late Dr. Robert Nelson, "for many years the Mott of Canada." It appears that this gentleman had once at the Hotel Dieu, in Montreal, experimented with colchicum, trying all the official preparations, sometimes with benefit, but in the main finding all unreliable and often totally worthless. He ultimately tried a strong alcoholic tincture prepared from fresh seed. He found that the shell of the seed contained a volatile oil, that when water was added to the tincture it became opalescent, like tincture of myrrh, and by its use he obtained extraordinary effects. He prepared it by adding to one ounce of the seed half a pint of highest-proof alcohol. After standing a fortnight and shaking once or twice daily it was fit for use. Add five drachms of this tincture to half a pint of water, or, rather, enough to make a half-pint, and of this the full dose is half an ounce. "Now," said he, "if you have a case of acute or subacute rheumatism give this every four hours, night and day, avoiding acids and giving a light diet, until the toxic effects of the colchicum are induced, viz., nausea or even vomiting, with active purging, which generally occurs by the time sixteen doses are taken, and the rheumatism will disappear like a flash. Up to this period there will be apparently no relief." To secure the beneficial effects, it should always be prepared by the physician himself.

In cases of acute and subacute rheumatism Dr. Nelson had never found its equal; also in rheumatic gout. In simple or local rheumatism, he did not expect anything from it.

Ichthyol in Burns.—Dr. Josef Schmidt recommends most emphatically the use of ichthyol in burns. If applied at once it prevents vesication and alleviates pain. In burns of the first degree an immediate application will remove all symptoms in a very short time. In burns of the second degree it will either remove all morbid symptoms or reduce the burn to one of the first degree, invariably dispelling the pain soon after the application. He believes that it will replace all other therapeutic measures of less efficacy.

Biniodide of Mercury in Scarlatina and Diphtheria.—Illingworth (*Brit. Med. Journal*) claims that biniodide of mercury is a specific for scarlet fever and diphtheria. Given in scarlet fever, he says, defervescence sets in immediately upon the administration of the medicine instead of upon the fifth day, and no desquamation ensues. Its specific character in diphtheria is shown by the rapid disappearance of the membranous deposit and by the reduction of temperature. The efficacy of the medicine depends upon the diffusible potassic iodide carrying the germicide biniodide to every portion of the circulation.

Chinolin.—Rosenthal (*Deutsche Archiv. für Klin. Med.*, 1887, bd. 42), has investigated the antiseptic powers of this substance. It is a clear, watery fluid, insoluble in water, having somewhat the odor of bitter almond oil. If a certain quantity of hydrochloric acid is added to the water, a clear solution results, and this was employed by the author in his experiments. Administered internally to rabbits, it promptly reduced the temperature, causing motor paralysis and a lowering of the heart action and respiration. It has been determined by the author that chinolin is one of the most effective of antiseptics. In solutions of 1:1000 it prevents decomposition of urine or meat for an indefinite period. Even when decomposition has begun, it may be arrested by stronger solutions, 5:1000. This property may, perhaps, prove of practical utility in the treatment of foul wounds, phlegmons, &c., and, as its antiseptic powers are exerted in very weak solutions, no bad results need be apprehended. Solutions of one-half per cent., which are strongly antiseptic, are well borne on wounded surfaces, mucous membranes and the conjunctiva, and even stronger solutions are practically harmless.

Stannum.—This is a medicine which, according to Dr. Seutin (*Revue Hom. Belge*), is not prescribed as often as it should be. Its pathogenesis presents a great number of valuable indications for the cure of various complaints—especially those of the respiratory and nervous systems and the digestive organs.

The following are symptoms pointing to its use: Pains along the course of the superior maxillary nerve, and extending to the eye; muscular stitches as in tic douloureux; tremor of the hands when trying to grasp anything, as in writers' cramp. The pains are uninfluenced by cold or heat. Headaches, beginning with vertigo, growing worse during several hours, and accompanied by nausea and vomiting, will yield to this remedy.

Stannum is also curative in gastralgia, characterized by constrictive, pinching pains in the stomach, and accompanied by faintness and nausea, especially after a meal.

In diseases of the chest it is often superior to all other remedies. Dr. Charge recommends it in chronic bronchitis and pulmonary phthisis, with greenish and offensive expectoration; fatiguing cough morning and evening, with great oppression. The cough is provoked by lying on the right side; chills and night sweats.

Hughes has been uniformly pleased with its effects in cases of prolapsus uteri.

Carbon Dioxide for Dyspnea.—Dr. Weill proposes the use of carbon dioxide to combat dyspnea. He says it was suggested to him when observing the experiments of M.

Brown-Séquard on the inhibitory effects of a current of that gas on the larynx. He gives the gas pure, for from two to five minutes at a time, using from two to five liters, once or twice a day. No bad effects are noticed, it is said, and the patients are all improved by the action of this gas, which has been considered more or less dangerous. The cases treated were mostly tuberculous ones, who had an attack of laryngitis and serious lesions of the lungs. They had a slight oppression, but continuous, with attacks of coughing, lasting from twenty minutes to half an hour, followed by severe dyspnœa. The inhalation of carbon dioxide cuts short these attacks, and, when given between the attacks, it seemed to prevent their occurrence, and certainly diminished their frequency and intensity. The same favorable effect was noticed in cases of emphysema.

REPORT OF SURGICAL PROGRESS.

By Egbert Guernsey Rankin, A. M., M. D.

Bone Transplantation.—Skin grafting has long and successfully been resorted to, but now the transplanting of bone is looming up. Dr. Weir, of New York, trephined the skull for the cure of epilepsy, the opening being about two and a half by three inches, then replaced the bone removed, and in about seven weeks after the operation all the wounds had healed save one; the bones were felt to be solid and painless. In another instance, a boy, aged three years, with necrosis of the entire diaphysis of the humerus, had the sequestrum removed, but the periosteum failed to develop bone. The surgeon at different times introduced into the arm pieces of bone, broken very small, taken from the tibia of children in rectifying incurvations. The engrafted pieces of bone grew, and in the course of fourteen months from the time of the first transplantation the boy had a functional humerus. Many other interesting cases are cited by Dr. Sherman, of San Francisco.—Dr. Abraham Livezey, in the *Medical Summary.*

On Artificially Increasing the Growth of Bone.—Helferich [*Greifswald, Arch. f. Klin. Chirurg, 1888, Bd. xxxvi, Hft. 4.*] for insufficient or retarded callus formation after fractures, and for necrosis with faulty involucration and consequent spontaneous fracture, recommends the following treatment, which is based upon the principle of hyperæmia at the affected part. An ununited fracture of the forearm will serve for an example. The limb having been immobilized with splint or plaster dressings, a medium-sized elastic rubber tube is passed around it above the seat of fracture, and fastened tightly enough to produce a certain amount of venous congestion in the parts below. At first the compression need not be kept up more than a few hours; later for days and nights. To control the œdema and localize the hyperæmia, the limb is bandaged above and below the affected spot.

It must be remembered that by this method we can only increase the growth of bone, but cannot excite it when absent. The patient soon learns the proper degree of tension necessary, so that there is little chance of the compression being excessive.

Helferich has used this procedure especially for ununited fractures with consequent false joint, and in eight cases was able to effect a cure within a few weeks. Of course if there is a total absence of bony growth this must be first excited by the usual methods (attrition of the ends of the bones, &c.). In fractures of the leg the tubing is applied to the middle of the thigh after previous immobilization of the parts below with a water-glass or gypsum bandage. In those of the thigh the compression is combined with typical extension, but as there is usually an abundant callus formation in these cases it need rarely be resorted to.

In cases of necrosis with insufficient or delayed osseous growth, ths method has proved very serviceable. It is recommended by the author that sequestrotomy should be performed as early as possible, since the action of the sequestrum in stimulating bony growth is purely problematical, and may be replaced by other means, whilst delay in operating favors shortening of the bone. In some cases he has employed the compression before separation of the sequestrum, with the view of favoring its expulsion and increasing the amount of new bone.

This method is positively contraindicated in tubercular affections of the bone, after operation for malignant tumors, and as a rule when large wounds are present, whether fresh or gathering.

Abortive Treatment of Syphilis.—Hutchinson has announced to the London Medical Society that he has prevented the appearance of secondary syphilis, and hence the establishment of induration, by the ingestion of one grain of hydragyrum cum creta three or four times daily for a period of from six to nine months. This preparation is better than the sublimate or iodide of mercury. I can be supported longer and the dosage is smaller. Dr. Hutchinson's experience with this remedy has been confirmed by Dr. Pitt, who has also obtained good results. It is very rare that the drug is not tolerated and the treatment obliged to be interrupted.—*Lœmaine Medicál.*

Resection of the Ascending Colon and Cæcum for Carcenoma.—From correspondent in *Sacremento Medical Times*, June, 1888:

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Prof. Hofmokl reported an interesting case of resection of the ascending colon and the cecum for carcinoma. The patient, a woman, 29 years old, had remarked, two years previously, the presence of a tumor in the right hypochondriac region, which had been taken for a movable kidney, for which reason she was directed to wear a *pelatte* for a long time. Owing to severe pains in that region, she was admitted into the hospital. She was greatly emaciated; the abdomen was not distended, but a movable tumor the size of a man's fist could be felt beneath the ribs; the swelling extended as far as the hypochondriac region. The great mobility of the tumor and the absence of symptoms of obstruction rendered the diagnosis very difficult. Irrigation of the intestines with water did not reveal any new symptom, the signs obtained palpation and percussion being unchanged. On November 14, 1887, the patient was put under the influence of chloroform, and an operation lasting three hours was performed. An incision 20 cm. in length was made on the right side of the abdomen, beginning near the arch of the ribs and reaching as far as Poupart's ligament. After the abdominal parietes and the peritoneum had been divided, the tumor, which was covered by the large epiploon, became visible. It was a neoplasm, the size of a man's fist, deriving its origin from the colon. The lower part of the cecum and the vermiform process were intact. The great mobility of the tumor was due to the presence of a broad and proportionately long mesocolon, as well as to numerous adhesions. The mesocolon and the false membranes which covered the tumor were ligatured with silk and severed with the actual cautery; the tumor was lifted out and excised. The adjoining parts of the ascending colon

and a part of the ileum were also resected. The escape of fecal matter from the resected ends of the intestine was prevented by ligaturing with slips of iodoform gauze, which were applied at a distance from the part resected. As the jejunum was somewhat distended, and the ascending colon slightly contracted, the extremities of the resected intestine could in this case be directly united to each other, and this was done by a three-fold silk suture. No severe hemorrhage supervened, and drainage tubes were not employed. Sublimate in the proportion of 1:1000, in combination with a half per cent. solution of tartaric acid, was used during the operation, as well as for the dressing. The subsequent course of the case was almost apyretic. During the first days only, there was an elevation of the temperature to 38.3° C.; afterwards it was normal, not exceeding 37.7° C. No vomiting occurred, and no intoxication with the sublimate. The bowels acted well on the fourth day after the operation, and on the twelfth day all the abdominal sutures were removed. For preventing decomposition in the intestine 1½ gm. of the salicylate of sodium (divided in ten doses) were administered three or four times a day. On the third day after the use of this drug, the fetid odor of the fecal matter had disappeared. On the eighteenth day after the operation a small suture abscess developed in the abdominal wall. The wound was opened, drainage tubes introduced, and the cavity of the abscess irrigated with a five per cent. solution of carbolic acid; healing soon followed. Six weeks from the date of the operation all dressings were removed, and two weeks later the patient was dismissed from the hospital. The microscopical examination of the resected part of the intestine, which had been made by Prof. Weichselbaum of this city, showed that it was an adeno-carcinoma.

A New Method of Treatment of Stricture of the Esophagus.—(Leyden, Berlin, *Idem.*) At the congress at Wiesbaden, April 9th to 12th, Leyden spoke of a new method which he had used for a year. Small canulæ are placed in the strictures and remain there. Ninety per cent. of esophageal strictures are caused by carcinomata; patients die of inanition. We can only prolong life a few days by rectal enemata. Esophageal sounds only give relief for a few hours, and are dangerous from the fact that the end of the sound comes in contact with the dilatation above the stricture, and prepares the way for perforation. Two methods of treatment are now in use designed to avoid this danger and effect a better method of sustenance. One the method which Leyden recommends, the other the surgical gastrotomy. The latter, employed quite frequently of late, has not been attended with brilliant results. In recent times English surgeons attempted to introduce permanent canulæ by shortening the sounds after their introduction. Leyden modified this in that he uses canulæ six centimeters (2¼ inches) long, which are introduced into the stricture by means of the sound. The deep-seated strictures of the cardia are accessible as well. In a very large number of cases the canula can be introduced and removed at any time by means of a thread fastened to it. In one case, where the thread broke, a patient carried the canula *in situ* ten months.

In the discussion Leyden acknowledged that a certain amount of skill was necessary for the introduction of the canula. In one case it took him three days before he could introduce it after he had allowed a soft esophageal sound to remain some time. He believes that the canula, by preventing the ingesta from irrigating the cancer by direct contact, lessens the growth and development of the tumor.

Resection of Left Lobe of Liver.—There is hardly an organ in the body that has escaped the surgeon's knife. The liver has now been attacked, for Dr. Langenbuch (Berl. Kl. Wochenschr, No. 3, 1888) records a case in which he successfully resected the greater part of its left lobe, which had been extensively deformed by tight lacing, and had caused great inconvenience and trouble to the patient.

The woman, about thirty years of age, was, in November, 1886, under treatment for erysipelas in the Lazarus Hospital, and when about to be discharged, convalescent, she begged that she might be relieved of a painful abdominal tumor that rendered life unbearable, and caused pain both in standing and lying down. On examination a tumor of the size of the fist was detected in the epigastrium, dense, elastic, not fluctuating, moving with respiration, and its dullness continuous with that of the liver. The diagnosis lay between hydated tumor and deformity from tight lacing (Schnürlebe), although the latter condition usually involves the right lobe. An exploratory incision proved that the case was of this kind, but involving the left lobe, and probably for that reason producing the painful symptoms. Dr. Langenbuch decided that it would be advisable to remove the source of so much distress, especially as the portion of the lobe forming the tumor was practically cut off from the rest of the organ by a broad but ligamentous pedicle, and therefore it was functionally of no service. Accordingly the pedicle was transfixed by ligatures, and the lobe excised. The same evening symptoms of severe internal hemorrhage appeared, and on reopening the wound the abdominal cavity was found to be filled with blood; this was sponged out, the bleeding vessels secured, and no further trouble arose from that source. The wound healed, but recovery was somewhat retarded by the development of ascites, which necessitated tapping on two occasions. At any rate, it was not permanent, and the patient left in February, quite well. The portion of liver removed weighed 370 grammes (about 12 ounces).

Photoxyline in Surgical Practice.—Von Wahl (*St. Petersburger Med. Wochenschrift*, No. 20, 1887,) says that a five per cent. solution of photoxyline, in equal parts of alcohol and ether, can be differentiated from collodium by the following properties: 1. Persistent from adhesiveness to the skin. 2. Absolute imperviousness to fluids. 3. Uniform compression of the tissues.

Photoxyline is suitable for: 1. Minor operations among walking patients. 2. Plastic operations upon the face and in the neighborhood of the male genitalia. Over wounds closed with sutures there is placed a thin layer of absorbent cotton saturated with photoxyline. In children, where the soaking of the dressing is not to be avoided, this painting proves a sure antiseptic treatment. 3. For laparotomy any further dressing of sutured wounds is superfluous, and the belly wound is secured in the best manner. —*Deutsche Med. Wochenschrift.*

Peroxide of Hydrogen in ancer of the Wound.—Dr. J. M. Love, in the *Progress*, recommends the peroxide in this affection as a cleanser, deodorizer and stimulator of healing in that portion of the ulceration probably dependent upon the irritating effects of accumulated purulent matter. The gratification and comfort to patient and attendants secured by the application well repays its use. One who has never observed the horrible stench in the room of a neglected cancer of the womb can have no conception of the value of the drug in this connection.

Painful Cystitis in the Female.—In an obstinate case

of cystitis of a year's standing in a strong peasant woman, M. Terrillon, of Paris, successfully employed forcible dilatation of the neck of the bladder, and injected a strong solution of cocaine.

Dangers of Antiseptics.—At the last meeting of the Berliner Medicinische Gesellschaft, Dr. Emil Senger read a paper on the influence of antiseptic remedies on the organs of the body, with special reference to operations on the kidney. It is well known that after nephrectomy, or even nephrotomy, many patients die with symptoms of uræmia or anuria, even when it had been ascertained beforehand by careful examination that the other kidney was quite healthy, and capable of secreting the necessary amount of urea. Dr. James Israël, chief surgeon of the Berlin Jewish Hospital, has propounded a very complicated theory as to certain nervous sympathies between the two kidneys, whereby an operation on one may give rise to degeneration of the other. Senger has now proved by experiments on rabbits and dogs that our antiseptic remedies are the cause of these complications. He injected into the animals, when in perfect health, one tenth or twelfth part of the quantity of corrosive sublimate, carbolic acid, &c., which is sufficient to kill them. He then extirpated one kidney, and examined it microscopically, with the result that in all cases he found glomerulo-nephritis. There was exudation between the glomerulus and the capsule, and the epithelium of the tubuli contorti was almost entirely destroyed. He found also fatty degeneration of the liver, the spleen, the heart-muscle, &c. The various antiseptic agents were found to be injurious in different degrees, corrosive sublimate being the most dangerous, then the others in the following order: Iodoform, carbolic acid, salicylic acid, boric acid. Senger therefore recommends surgeons to avoid antiseptics in operations on the thorax and abdomen, and urges them either to employ sterilized water after the manner of your compatriot, Mr. Lawson Tait, or a solution of salt. By bacteriological and pathological researches he proved, first, that this kills the streptococcus pyogenes aureus in twenty-eight minutes, and that the effect is independent of the degree of concentration, for a five per cent. solution is just as effectual as a twenty per cent. Secondly, he claims to have shown that chlorate of sodium does not in any way injure the organs, and that no dose is strong enough to kill any animal.—*Med. Journal and Examiner*, June, 1888.

Intraparenchymatous Injections of Ozone Water for Cancer (*Wiener Med. Presse*, May 6, 1888).—Dr. Joseph Schmidt, of Aschaffenburg, has employed in two cases intraparenchymatous injections of ozone water for cancer, and has obtained such surprising results that he seems induced to submit this method of treatment to a further trial. The method consists in the injection of ozone water in the strength of one to three grains to a quart of water. The injections were made with a Pravaz's syringe. The number of injections varied, according to the size of the affected area, from one to ten or more a day. They were made into the mass of the cancer itself, as well as into the healthy tissue bordering upon it, and even into the swollen and suspicious glands. The pain, when the injections are made with a rather dilute solution, is not very marked, and disappears completely after several minutes or half an hour. Frequent local symptoms, especially when the injections are made with rather strong solutions, are, after a short time, moderate œdema, and slight redness and tenderness to the touch; these symptoms disappear in a few hours when the weaker solutions are used; but when the stronger solutions are used, they last for several days. During the progress of this treatment the cancerous ulcers became cleaner, smaller, and cicatrize. The cancerous nodules grew smaller, and became gradually very hard, so that the introduction of the needle was often difficult, and was accompanied with a grating sound; in such places but a few drops could be injected with difficulty. After treatment had been continued some time, the parts, which at the beginning were swollen, became peculiarly dense, tense with œdema, of a bluish-red color, and tender to the touch, as well as painful. When such parts were cut, under the skin, which appeared normal, was seen an œdematous, cellular tissue, and under this a thick, dense, callous mass. The microscope revealed but very few nests of cancer cells. When this treatment was continued longer, the swelling receded, and a connective-tissue shrinkage occurred. Bad consequences from the injections were never noticed.

Successful Removal of a Tumor of the Spinal Cord.—Recently a private patient of Dr. Gowers and Mr. Victor Horsley was good enough to allow the members of the Medical and Chirurgical Society of London to see how much he had been benefited by the removal of a tumor from his spinal cord some time before. He had suffered most severe pain for about three years. Its maximum was felt just below and inside the angle of the left scapula, and was accompanied by absolute loss of sensation and motion of the body and limbs below that level. The upper border of anæsthesia was distinctly in the region of the fifth intercostal nerve of the left side, whilst on the right side it was less accurately defined, but extended no higher.

All the symptoms pointed to tumor of the cord, and the agonizing character of the pain made an attempt to remove it justifiable. Horsley therefore removed the spines and portions of the lamina of the fourth and fifth dorsal vertebræ. No tumor was to be found; but upon similarly treating the third vertebræ a small oval myoma, compressing and making a deep groove in the left side of the cord, came into distinct view and was easily shelled out of its bed.

A drain was left in the upper part of the wound in closing it, and from this flowed small quantities of cerebro-spinal fluid for some days, but the wound healed rapidly and without constitutional disturbance.

The previous intense pain continued without abatement for a month, but after that it gradually and intermittently decreased, until at the date of exhibition, seven months after the operation, it had entirely disappeared, while sensation and motion of the body and legs had almost completely returned.

Hay Fever Cured by Wearing a Wig.—Dr. Rumbold writes as follows in the *American Practitioner and News*: "A large proportion of persons who are afflicted with pruritic catarrh hay fever are bald-headed, and the scalps of very many of them perspire profusely on the slightest exertion. With such, a very slight draught of air is sufficient to bring on a paroxysm of sneezing. An acquaintance, who had the misfortune to be quite bald, informed me in 1871 that he cured himself of his hay-fever by wearing a wig. He felt an improvement on the first day of wearing it, and did not have an attack after that season. Of course he continues to wear the wig.

"I strongly urge all my bald-headed patients, whether afflicted with pruritic catarrh or with common nasal catarrh, to wear a wig."

The Food in Acute Diseases.*—A medical education does not yet include any teaching as to what is good in the matter of food in acute illness—in this country at least. So said Sir Wm. Roberts in his address on "The Feeding of the Sick" before the British Medical Association in 1885; and his assertion cannot be gainsayed. Nor is it easy to see how long it will be before a less scandalous condition will come into existence. It is understood, both in and out of the profession, that a "slop diet" is the proper thing. But "slops" practically are no more than meat infusions, especially beef tea, milk and seltzer water, and home-made lemonade. Meat infusions, however, are *not* food, though they have a value of their own. They contain valuable blood-salts and extractives which are stimulant: but they are not "food." They are excellent vehicles for food—as broken biscuit, for instance. Milk should be converted into whey, according to Dr. King Chambers. Lemonade has a certain food-value in proportion to the sugar it contains, and is all the better if made with cream tartar.

What is required by persons acutely sick? That depends upon the temperature. If there be pyrexia present, it is not only useless to give albuminoid matters, as no histogenesis goes on, but there is the positive risk of adding to the waste and excrementitious matters floating in the blood. Soluble carbohydrates and blood salts are what is required. A person may be acutely ill, as in bronchitis, for instance, with but a very trifling rise of temperature, and then milk is not contra-indicated. In such cases milk which has been well-boiled is excellent. The advantages of such boiling are twofold: (1) it destroys disease-germs, and (2) the curd is small and flocculent, and there is no risk of that firm curd which is fraught with so much danger, especially in typhoid fever. It is also very pleasant in the form of junket, or "curds and whey." Some soluble carbohydrate may be added with advantage. But what is a "soluble carbohydrate?" the reader asks impatiently. He ought to have been told in his college course; but it was nobody's duty to tell him, as no examiner would ever ask him such a question. The lecturer on physiology describes to him the act of digestion, and tells him how the saliva converts insoluble starch into soluble grape sugar in order that it may pass through the wall of the alimentary canal. But what he has to do when the saliva is scanty and inert is not yet the business of any teacher. He has that to find out for himself—if he can.

The first person who recognized the importance of converting insoluble starch into a soluble maltose was M. Mellin, with his "non-farinaceous food." He has been followed by a host of imitators, and many excellent predigested foods are on the market. Such foods consist, in the main, of baked flour, or biscuit powder, and malt. They go well with meat infusions, and lend to them a true food-value. With a little salt the whole forms a valuable drink-food, hot or cold. As a food merely the malt extracts possess no advantage over dry maltose. The malt extract is difficult to handle from its viscidity. A dry preparation is easily made into a syrup which will readily pour. Such a malt syrup is most pleasant with an aerated water, and can be iced if desired. A little sharpness can be given to it by a little lemon juice, or lime juice. Or the syrup can be frozen into a nutritive ice. Where the pyrexia is not great it is well to boil milk (one pint) and Mellin's food (a tablespoonful) for an hour. Some of this with an aerated water is most palatable and nutritive. The body wastes in pyrexial disease, and often the lamp of life goes out for want of fuel. If no food be given the sufferer sinks of inanition. If food be given which requires digestion when the digestive ferments are inert, the sufferer dies of starvation just the same. Death from hunger is the hard lot of each. Yes, and myriads perish annually; succumb to this horrible fate, with loving friends around them, anxious to be of service and grudging no expense, while the medical man looks on complacently, and assures them that "everything is being done," unconscious of the abominable falsehood he is uttering. The solemn farce goes on in hundreds of households annually without a scintilla of suspicion being aroused as to the true state of affairs. It is something worse than homicide by misadventure.

What is required is fuel-food in such form as not to require the action of the digestive ferments when these are powerless. The sugar of milk; the maltose and dextrine of prepared foods; with water. And some blood salts. In all fevers; in inflammatory conditions; in the acute gastric upsets which occur with delicate children and phthisical patients; in all gastric diseases; and in those conditions of gastric catarrh which follow upon obstruction in the pulmonary circulation, whether due to disease in the heart or lungs: liquid food containing a sufficiency of carbohydrates in soluble form are essential to life. There is no necessity to make the meat infusions too strong. When persons speak of the amount of meat used in the preparation of the beef tea given to a certain person who has joined the majority, they do not know what pernicious nonsense they are talking—pernicious because misleading. The food-value of the beef-tea depends upon what is added to it!

* Dr. J. Milner Fothergill in *The Hospital Gazette.*

The Climate of Siberia.—From George Kennan's illustrated account of the "Plains and Prisons of Western Siberia," in the June *Century* we quote the following: "It is hardly necessary to say that a country which has an area of five and a half million square miles, and which extends in latitude as far as from the southern extremity of Greenland to the island of Cuba, must present great diversities of climate, topography and vegetation, and cannot be everywhere a barren arctic waste. A mere glance at a map is sufficient to show that a considerable part of western Siberia lies farther south than Nice, Venice or Milan, and that the southern boundary of the Siberian province of Semirechinsk is nearer the equator than Naples. In a country which thus stretches from the latitude of Italy to the latitude of central Greenland one would naturally expect to find, and as a matter of fact one does find, many varieties of climate and scenery. In some parts of the province of Yakutsk the mean temperature of the month of January is more than fifty degrees below zero, Fahr., while in the province of Semipalatinsk the mean temperature of the month of July is seventy-two degrees above; and such maximum temperatures as ninety-five and one hundred degrees in the shade are comparatively common. On the Taimyr peninsula, east of the Gulf of Ob, the permanently frozen ground thaws out in summer to a depth of only a few inches, and supports but a scanty vegetation of berry bushes and moss, while in the southern part of western Siberia watermelons and cantaloupes are a profitable crop, tobacco is grown upon thousands of plantations, and the peasants harvest annually more than 50,000,000 bushels of grain. The fact which I desire especially to impress upon the mind of the reader is that Siberia is not everywhere uniform and hom-

ogeneous. The northern part of the country differs from the southern part quite as much as the Hudson Bay territory differs from Kentucky; and it is as great a mistake to attribute the cold and barrenness of the Lena delta to the whole of Siberia as it would be to attribute the cold and barrenness of King William Land to the whole of North America.

"To the traveler who crosses the Urals for the first time in June nothing is more surprising than the fervent heat of Siberian sunshine and the extraordinary beauty and profusion of Siberian flowers. Although we had been partly prepared, by our voyage up the Kama, for the experience which awaited us on the other side of the mountains, we were fairly astonished upon the threshold of western Siberia by the scenery, the weather and the flora. In the fertile, blossoming country presented to us as we rode swiftly eastward into the province of Tobolsk, there was absolutely nothing even remotely to suggest an arctic region. If we had been blindfolded and transported to it suddenly in the middle of a sunny afternoon, we could never have guessed to what part of the world we had been taken. The sky was as clear and blue and the air as soft as the sky and air of California; the trees were all in full leaf; birds were singing over the flowery meadows and in the clumps of birches by the roadside; there were a drowsy hum of bees and a faint fragrance of flowers and verdure in the air, and the sunshine was as warm and bright as that of a June afternoon in the most favored part of the temperate zone."

Proposed Water Supply.—A Swiss engineer, Herr Ritter, has submitted to the Paris municipality a plan for furnishing that city with an ample supply of portable water from the lake of Neufchatel, Switzerland, at a cost of about $60,000,000, and the proposition is likely to be accepted. The distance between the Lake of Neufchatel and Paris is 312 miles, and the surface of the lake is 1620 feet higher than the mean level of Paris, its total area covering 140 square miles. This vast body of water, even if it were not replenished, would be sufficient to supply Paris for two years at a rate of 133 gallons per head per day, the level of the lake falling no more than three feet, and the water would arrive in Paris at a temperature of 50° Fahrenheit. Herr Ritter does not intend to take the water from the surface of the lake, but to draw it off by an underground heading 262 feet below the surface of the lake, where it has a temperature of only 43°. The water would be taken through a tunnel twenty-two miles long under the Jura mountains to Dessoubre Valley, in the department of the Doubs, and then in an arched conduit along the slopes of the hills to Paris, where it would arrive still at an elevation of 394 feet. Not only will this scheme, if carried out, furnish the districts through which the conduit runs with water, but the elevation the water has when reaching Paris will make it highly valuable as furnishing power for workshops and small manufacturers. The scheme is a great one, and if accepted, will require six years for its completion.

There seems to be no reason why Lake George could not be utilized to supply New York City and intermediate points with an abundance of water.

To Remove a Cinder From the Eye.—Dr. R. W. St. Clair, in the *Medical Summary*, tells how to remove a cinder or particle of dust from the eye, and illustrates as follows:

A few years since, I was riding on the engine of the fast express, from Binghamton to Corning. The engineer, an old schoolmate of mine, threw open the front window and I caught a cinder that gave me the most excruciating pain. I began to rub the eye with both hands. "Let your eye alone and rub your other eye;" this from the engineer. I thought he was chaffing me, and worked the harder. "I know you doctors think you know it all, but if you will let that eye alone, the cinder will be out in two minutes," persisted the engineer. I began to rub the other eye, and soon I felt the cinder down near the inner canthus, and made ready to take it out. "Let it alone, and keep at the well eye," shouted the doctor *pro tem.* I did so for a minute longer, and looking in a small glass he gave me, I found the offender on my cheek. Since then I have tried it many times, and have advised many others, and I have never known it to fail in one instance unless it was as sharp as a piece of steel, or something that cut into the ball and required an operation to remove it. Why it is so I do not know. But that it *is* so I do know, and that one may be saved much suffering if they will let the injured eye alone and rub the well eye. Try it.

Preventive Inoculations for Scarlet Fever.—The day is probably not far distant, says the *Gazette Méd. de Paris*, when scarlet fever, at present the greatest scourge of childhood, will be as effectually prevented by inoculation as smallpox is by vaccination. Stickler, of Paris, observed that horses are often affected by a disease quite similar to scarlet fever, and, indeed, it is sometimes known to veterinarians by that name. He inserted about six drops of the nasal discharge of the diseased horse under the skin of four rabbits and a dog, and within twenty-four hours an exanthema resembling scarlatina appeared, which was followed in four days by desquamation. The associated symptoms were fever, anorexia, redness of the nasal mucous membrane, with abundant secretion and enlargement of the lymphatic glands. The animals recovered in eight days, and the inoculation of scarlatinal blood gave negative results.

Stickler then inoculated twelve children with the mucus of the horse. In every case a punctiform eruption appeared within twenty-four hours, and was accompanied by fever and enlargement of the glands. The eruption lasted six days, and terminated in desquamation. After recovery these children were inoculated with scarlatinal blood, with absolutely negative results.

Bromine in Poisoned Wounds.—In the *N. A. Jour. of Hom.*, Dr. Terry writes: "I have had poisoned fingers so many times and have been relieved so speedily on these various occasions with the use of bromine, that I feel that I shall be a Good Samaritan to the surgeons, as well as to the students in the disecting room if I reimpress this old remedy on your minds in a not unknown light, viz., its value as a remedy in poisoned wounds."

The preparation Dr. Terry uses is one containing a drachm of the bromide of potash and an ounce of pure bromide in eight ounces of water, a glass-stoppered bottle being used.

In using the mixture he pours about a drachm into a glass—presumably a wine glass—and fills one third with water. The finger is inserted for some distance beyond the wound for some minutes and repeated every three or four hours. No dressing is needed. It arrests the inflammatory action, the abnormal heat disappears and with it the pain.

MISCELLANY.

—Natives near Asheville, North Carolina, receive 1.75 a pound for ginseng root, which they dig in the woods, for exportation to China, from whence it is then imported back to this country in regular packages as the genuine Chinese article.

—The Superintendent of the State Insane Asylum, Pueblo, Col., speaks in high terms of Tongaline in neuralgia, and in the painful forms of rheumatism and rheumatic gout.

—For the past two years we have used as table wines the California Zinfandel claret and the Riesling in preference to the French and German wines. They are cheaper in price, absolutely pure and more agreeable to the taste than the imported wines of similar grade.

—Scheier, of Berlin, has studied 125 cases of cancer of the larynx which have been reported since 1880. In four cases there was no operation and all died. In the sixty-eight total exterpations of the larynx twenty-three died, seventeen relapsed within the year, six died of other diseases, thirteen are reported cured, and nine remained free from relapse for sixteen months.

—*Myostitis*, interstitial inflammation of muscular tissue, may be confused with sarcoma, the microscopal appearances being quite similar. Only the most careful study of a number of specimens will enable the observer to differentiate the two conditions.—*Microscope.*

—Dr. B. G. Carleton spends the summer, as usual, at Whitefield, N. H. Dr. W. H. Scott has removed to No. 338 West Forty-fourth street.

—Dr. Swan will be at Cresson, Pa., till Sept. 15,

—Dr. Strong, Chief of Staff Ward's Island Hospital, reports 937 patients under treatment during the month of June; mortality, 2.13 per cent. Three thousand two hundred and ninety-three patients have been under treatment since January 1st; mortality, 6.23 per cent.

—The *American Meterological Journal*, Ann Arbor, Michigan, offers a prize of $200 for the best essay on tornadoes, and $50 for the second best essay. A circular giving details can be had from the editor, Ann Arbor, Mich.

—The *Virginia Medical Monthly* says the application of a solution of fifteen grains of boracic acid to the ounce of water three or four times a day will speedily abort a stye if taken in the early stage.

—The *Popular Science News* says if you sprinkle the bed with a two per cent. solution of carbolic acid and touch the face and hands with it you will not be troubled with mosquitoes.

—Dr. Pitzer recommends in cholera infantum ten drops of tincture of gelseminum and ten grains of bromide of potash to two ounces of water of which a teaspoon can be given every hour.

—New regulations in regard to the sales of milk in Berlin went into effect on the 1st of last August. Every vender is to have a license, and the milk is classfied as "full (pure) milk," "half milk," and "lean milk." This is much like the London classification of eggs. There they have "new-laid eggs," or "first-rate eggs," "fresh eggs," or "moderately good eggs," and "eggs."

—The University of Bucharest has endowed the chair of histology and bacteriology with an annual salary of five thousand dollars, and appropriated twenty thousand dollars for fitting up laboratories, etc.

—It is well known that a cold sensation reaches consciousness more rapidly than a sensation of warmth. Dr. Goldschneider, of Berlin, is reported in *Science* to have recently accurately measured the length of time necessary to perceive these sensations. Contact with a cold point was felt on the face after 13.5, on the arm after 18, on the abdomen after 22, on the knee after 25 hundredths of a second. The sensation of a hot point was felt on the same surfaces after 19, 27, 62, and 79 hundredths of a second respectively. This great difference in time has an important theoretical bearing on the physiology of dermal sensations.

—A current medical opinion makes large brains and wisdom concomitant terms, and in corroboration of this view the large brain of Cuvier, the naturalist, weighing sixty-four ounces, is cited. On the other hand, Gambetta's brain weighed only thirty-four ounces, below the normal alleged limit. The explanation of these seemingly contradictory facts is a simple one. Cuvier's brain-weight represented, not intellect, but healed-up hydrocephalus, from which the naturalist suffered in childhood. Intellect depends on brain quality rather than quantity.

—The degree of LL. D. has been conferred on M. Lawson Tait, the eminent gynecologist, by Union College, at its last commencement.

—Oxygen, administered *per rectum* by the Bergeon apparatus, has been used with marked success at St. Vincent's and Bellevue Hospitals in several cases of poisoning by illuminating gas.

—Dr. Parrachia has made a curious study of the differences between criminals and law-abiding citizens as exhibited by their walk. He not only has shown how we may distinguish criminals in general, but has laid the beginning of the differential diagnosis between various evil-doers. He found that in criminals in general (obtained from the study of forty criminals) the left pace was longer than the right, the lateral deviation of the right foot was greater than that of the left, and the angle formed by the axis of the foot with the straight line was greater on the left side than on the right. It would thus seem that, in general, the gait of a criminal betrays a marked preponderance of power of the left foot over the right—a true sinistrality. This also agrees with the discovery of Marro that criminals are often left-handed.

—Dr. Jackson says that the preliminary washing the parts with soap and water before using cocaine should be avoided, as the alkali of the soap prevents anesthesia.

—A new disinfecting compound for purifying the atmosphere of the sick-room has just been presented to the Berlin Medical Society: Oils of Rosemary, Lavender, and Thyme, in the proportions of ten, two, and two and one-half parts respectively, are mixed with nitric acid in the proportion of thirty to one and one-half. The bottle should be shaken before using, and a sponge saturated with the compound left to diffuse by evaporation. Simple as it is, the vapor of this compound is said to possess extraordinary properties in controlling the odors and effluvia of offensive and infectious disorders.

—The great temple of Karnak, at Thebes, Egypt, contains the oldest botanical work in the world. It is sculptured on the walls, and represents foreign plants brought home by Thotmes III from a campaign in Arabia. Not only is the plant or tree shown, but the leaves, fruit and seed pods are illustrated separately after the fashion of modern botanists